FEEDSTUFFS

★ A WEEKLY NEWSPAPER ★

FOR THE FEED MANUFACTURER, JOBBER, BROKER and DEALER

Volume 31—Number 28 | JULY 11, 1959 | 1 Year $5, 2 Years $8

FEEDSTUFFS *Features This Week*

POULTRY FEEDING: What the future has in store for poultry management and feed formulation is discussed on **page 22.**

LAYER PROJECT: How a feed firm and a Texas college cooperated in an experimental poultry project is told on **page 26.**

SELLING: A feed salesman tells how he sells to farmers in an article starting on **page 48;** tips on good sales management are outlined in a discussion appearing on **page 52.**

PELLETS: A study of the effect of pelleted ear corn in lamb fattening rations is reported on **page 102.**

— REGULAR FEATURES —

Joe Brooks	28	Worth Looking Into	86
Convention Calendar	32	Feed Service Bulletin Board	88
It Happens Every Day	50	Classified Ads	106
Putting Research to Work	62	Feed Markets in Detail	110

CAPITAL COMMENT

Further Consultation with FDA Seen

By JOHN CIPPERLY
Feedstuffs Washington Correspondent

WASHINGTON—Mature judgment appears to have overtaken any "hysteria" in connection with the chemical, drug and feed industry problems resulting from the Food and Drug Administration policy statement on the Delaney amendment to the food additive law as it applies to certain veterinary drugs in feeds.

While the ruling has imposed some severe restrictions on the feed industry and on the chemical industry, it is now understood that all industry groups have found a common cause of restraint wherein they will attempt to resolve difficulties through consultation with FDA officials without discarding their recourse to congressional or legal action.

It appears that the total position of the feed industry and the chemical industry suppliers is one of consultation—perhaps further summit conferences between the affected industries and FDA to reach some areas of agreement, although such agreements are not easy of attainment

(Turn to CAPITAL COMMENT, page 113)

Results of Conference with FDA on Arsenicals Outlined by Drug Group

DES MOINES — Action aimed at exempting organic arsenicals now in use in feeds from the food additive amendment to food and drug law is being taken by the Animal Health Institute and drug suppliers in consultations with Food and Drug Administration officials.

It is hoped that the action will bring an end to certain problems which have resulted from the Food and Drug Administration's policy statement on the Delaney amendment to the food additive law in relation to use of veterinary drugs in feeds.

The Animal Health Institute, whose membership includes companies supplying drugs to the feed industry, held a conference last week in Washington with FDA officials. A report on the conference was subsequently prepared and sent to AHI members and to AFMA members.

AHI Statement

The report is of interest and importance to all feed manufacturers. Here is the AHI statement on its

(Turn to DRUG GROUP, page 113)

AFMA Maps Program on Drug Problem; Recommendations Listed

CHICAGO—A program of action on the feed industry's current veterinary drug problem has been drafted by the American Feed Manufacturers Assn., and efforts are continuing to resolve a situation which involves confusion and inequities for feed manufacturers.

The problem is that resulting from the Food and Drug Administration interpretations of the Delaney amendment to the food additive law and action imposing restrictions dealing with feed industry use of estrogens and arsenicals.

The current situation has complicated legal aspects, and one of the principal steps taken by the AFMA was the arranging for the services of an expert attorney, Bradshaw Mintener, who understands the feed industry and FDA procedures. Work is now going forward in Washington on this front, AFMA officials pointed out this week. Also, the feed

(Turn to AFMA, page 112)

NTF Calls Off Current Action On Enabling Act

MT. MORRIS, ILL.—The decision to take no further action regarding an enabling act of any type for the turkey industry at this session of Congress was a major item of business at the annual summer business meeting of the National Turkey Federation at Gearhart, Ore., June 29-30, according to an NTF report.

The decision was reached after conferences with many NTF leaders who are supporting the "no-controls" enabling act, as well as congressional leaders, those sponsoring the so-called "control-type" enabling act and others. All camps agreed that, in view of the general situation, to pursue the matter further at this session of Congress would be futile and would merely result in a waste of time and money.

NTF officials said the major obstacle to further progress at this session is the "bitter fight" between

(Turn to NTF, page 109)

GMI to Build New Feed Mill in Idaho

NAMPA, IDAHO—Plans have been drawn and bids have been requested for a new and enlarged General Mills, Inc., feed mill and warehouse in Nampa, according to A. E. Folkman, manager. It will replace the building destroyed by fire last December.

Construction work is expected to get started soon after the contract has been awarded, or in about 30 days.

The new structure will be an all-steel building, and in addition to an enlarged warehouse area, it will house a milling unit capable of producing a complete line of mash and pelleted Larro Surefeeds.

Bulk handling will be featured throughout, from the unloading of grains and ingredients from trucks and cars, through the milling and mixing processes, to warehousing and delivery by bulk trucks.

Parking areas and loading facilities will be provided for "will-call" customers, while further use of bulk trucking equipment will provide better delivery service throughout a wide area, officials said.

USDA Notes Hog Price Outlook

WASHINGTON—Any seasonal increase in hog prices this summer will be small, but certain factors restraining a summer advance will also moderate the expected fall decline.

This is pointed out by the U.S. Department of Agriculture in analyzing the hog situation and outlook.

Prices will decline substantially this fall, but not more than usual, and perhaps less. If the indicated expansion in swine numbers continues, the cyclical low price for hogs is likely to come in the fall of 1960, when prices could become very seriously low, say the USDA economists.

(Market reports this week said Chicago hog prices fell July 9 to the lowest point since November, 1956, with the average price an estimated $17.70 cwt. Usually hog prices reach their high at this time of year. Last year on July 1 the market hit a high of $25.25. Continued large supplies of

(Turn to HOGS, page 109)

New Firm to Pellet Complete Rations

WILLOW ISLAND, NEB.—A new feed company, Pel-Tech, Inc., has been formed here to specialize in the formulation, manufacture and sale of complete pelleted cattle, swine and sheep rations.

Officers of the new corporation are Wayne L. Allen, president; Robert G. Boekel, vice president; Robert C. Scholes, vice president in charge of sales, and Harvey P. Sutton, secretary-treasurer.

A new plant, designed by the Archer-Daniels-Midland Co. machinery division, will be completed here by about Sept. 15. It will have a capacity of 200 tons of pelleted feed per day and will be of the latest push-button design.

Feed produced will be marketed under the name of Compleco Feeds.

Mr. Allen and Mr. Sutton have been in the dehydrated alfalfa business, managing plants. Mr. Scholes recently was with Nutrena Mills as a feed salesman.

Feed Dealer Brothers in Illinois Plan to Expand Their Hog 'Motel'

OAKLAND, ILL.—Two brothers who recently became feed dealers in this Illinois town have taken the contract cow pool idea and applied it to hog feeding. Fred and Max Miller call their customized hog feeding operation a "hog motel."

Currently the Miller brothers, who farm about 500 acres near Oakland in addition to handling their feed dealership, are feeding 500 hogs for seven farmers in their "motel." They're charging owners of the hogs 2¢ per pig per day for housing and labor. Farmers patronizing the Hog Motel are required to buy feed for their hogs from the Millers.

The brothers are dealers for Kent Feeds, Inc., of Muscatine, Iowa.

Max, 28, said there has been enough interest in their new operation to get him and his brother thinking about at least doubling its size. Their present $15,000 structure, 40 by 150 ft., is big enough to accommodate 500

(Turn to HOG 'MOTEL,' page 109)

FEEDSTUFFS

A WEEKLY NEWSPAPER

Published by THE MILLER PUBLISHING CO.

2501 Wayzata Blvd., Minneapolis, Minn.

Address Mail to: Box 67, Minneapolis 40, Minn.

Telephone FRanklin 4-5200 - All Offices Serviced by Bell System Teletype

EDITORIAL STAFF—George L. Gates, Editor; Roger Bergland, Managing Editor; John Cipperly, Washington Correspondent; Emmet J. Hoffman, Merchandising Editor; John S. Franklin, James E. Sharon and James H. Ross, Editorial Assistants.

WASHINGTON CORRESPONDENT—John Cipperly, 604 Hibbs Building, Washington, D. C., Telephone, Republic 7-8534.

ADVERTISING STAFF—Wilfred E. Lingren, Advertising Director; Carl R. Vetter, Advertising Department Manager; Bruce A. Kirkpatrick, Advertising Production Manager; Leland C. Hubert, Assistant Advertising Production Manager; R. Dale Swenson, Promotion Manager.

BUSINESS STAFF—Martin E. Newell, Chairman of the Board of Directors; Milton B. Kihlstrum, President and Treasurer; Wilfred E. Lingren, Executive Vice President; Don E. Rogers, Vice President; Paul L. Dittemore, Vice President; Donald G. Neth, Secretary; T. A. Gaden, Circulation Manager; James G. Pattridge, Assistant Treasurer; Richard L. Ostlund, Office Manager; Walter O. Buchkosky, Production Superintendent.

BRANCH OFFICES—SOUTHWEST, Martin E. Newell, Manager; Thomas E. Letch, Assistant Manager, 612 Board of Trade Bldg., 1005 Wyandotte St., Kansas City 5, Mo. (Tel. Victor 2-1350); EASTERN STATES, Paul L. Dittemore, Manager; George W. Potts and James W. Miller, Advertising Sales Representatives, Suite 3214, 551 Fifth Ave., New York 17, N. Y. (Tel. Murray Hill 2-2185); CENTRAL STATES, Don E. Rogers, Manager; Henry S. French, Assistant Manager; Amos W. Standish, Advertising Sales Representative, 2832 Board of Trade Bldg., 141 W. Jackson Blvd., Chicago 4, Ill. (Tel. Harrison 7-0515); NORTHWEST, Paul A. Anderson, Advertising Sales Representative, P. O. Box 67, Minneapolis 40, Minn. (Tel. Franklin 4-5200).

Correspondence regarding subscriptions, changes of address, etc., should be sent to Circulation Manager, Feedstuffs, Box 67, Minneapolis 40, Minn. Single copies 50¢. Subscription rates: One year $5, two years $8, in the U.S., U.S. possessions, Canada and Pan-America. Add $3 a year for postage to other countries. Readers are urged to give prompt notice of change of address and to anticipate future changes by at least two weeks' advance notice. Ask postman for form 22-S. Feedstuffs accepts subscriptions only through its own offices; no subscription solicitors are employed or recognized. Associated publications: The Northwestern Miller, The American Baker, Milling Production, Croplife, Farm Store Merchandising.

Entered as second-class matter Feb. 25, 1947, at the post office at Minneapolis, Minn., under the Act of Mar. 3, 1879

The regional circulation of this issue is concentrated in the northeastern states

Top of the Hopper

RESPONSE TO A NEED FOR BETTER marketing methods for livestock and poultry products is much in evidence these days. Not all production problems have been licked, of course, and there is no doubt that efforts to streamline growing methods will continue to get emphasis. However, it has been the opinion of economists and other types of industry experts for some time that improvements in marketing—including maintenance of quality, merchandising and filling of market needs in an orderly manner—must be accomplished in order to retain profits from production.

The "word" on this need has been sounded and echoed so frequently that one might well note with little surprise that efforts to stress better marketing are developing on a broad scale. It isn't just a matter of urgings from industry experts. The action is resulting from economic necessity.

News columns more and more reflect this increased activity. Within the past few weeks these developments, among others, have been reported in Feedstuffs: A coordinated production, processing and marketing organization for eggs has been established in Pennsylvania. A new Colorado egg marketing group has been formed. Minnesota egg producers are attempting to develop improved stability for their production. Poultry auctions intended to improve broiler marketing practices have been established in North Carolina, Texas, Arkansas and Alabama, following a similar move several weeks earlier in Georgia.

All of these moves are aimed at improving hit-or-miss marketing methods which often can be blamed for price depression and costly adjustments in production. They reflect an attitude of coordinated problem-solving which in the long run could hold much promise for greater stability in agricultural production. More of this sort of action can confidently be expected.

THIS AGE OF SPECIALIZATION and increased technology in agriculture had a regional feed manufacturer who makes a general line of feeds thinking the other day about more specialization in his sales force. While a number of firms with conventional sales forces also have poultry and other specialists to work with the salesmen, this manufacturer was thinking of going even farther.

Rather than just have salesmen handling certain geographical areas, he would concentrate on sales specialists in poultry, swine, dairy, beef cattle and sheep production. Each would deal entirely with one type of feed and work with the specialized producers using these types of feed.

A GOOD MANY AGRICULTURAL COLLEGES have been calling special attention to employment opportunities for graduates in agri-business, including the feed industry. And many have set up special curricula for this type of education. A reminder of this came in a college bulletin from Utah State University. The bulletin outlines specifically how the university has arranged programs of study designed, for one thing, to provide training qualifying the graduate for employment in agricultural industry, including feed manufacturing, among others. Programs like this are an encouraging sign that the feed industry, with its widening scope, will have sources of trained manpower. Now the job is to help get more students enrolled in these courses.

THE STATE OF THE FEED BUSINESS was the subject of some comments by Dick Ammon (now with the Northeastern Poultry Producers Council) in his final letter to members as secretary of the Pennsylvania Millers & Feed Dealers Assn. Some of his comments were: "If over-production is the plague of agriculture today, it then follows that the feed industry is also

(Turn to **TOP OF THE HOPPER**, page 109)

How's Business?

AN EVERY WEEK REVIEW OF FORMULA FEED BUSINESS VOLUME, INCLUDING PRICE, SUPPLY AND DEMAND TRENDS

Formula feed production around the country this week moved along at a steady rate—but there were mixed reports from the different regions regarding what may be ahead in the near future. The general tone was one of neither boom nor bust. While most manufacturers were fairly well pleased about prospects, reports from some regions indicated a slightly gloomy outlook. Farmers' preoccupation with crops and sliding hog prices accounted for most of this gloom. The hog-corn ratio keeps on slipping. It was 11.9 for the week ended July 8 compared to 12.3 the week before and 17.8 for the comparable week last year. The wholesale feedstuff price index edged up to 81.0 from 80.6 the previous week but was blow the 86.2 index of a year earlier. The feed-grain index dropped to 68.4, which is 2 points below a week ago. (Ingredient prices in detail on pages 110-112.)

Northwest

Of primary current concern among feed manufacturers in this region is what may happen to the demand for hog feed, the sales leader for many weeks. Hog feed volume still is holding up, but the lower-hog-price scare has mixers wondering if pork producers will cut back their feeding volume and intensity. There were indications from manufacturers that producers are still finishing off their bogs for market. One industry representative said his firm is making an all-out effort to help farmers trim their hog production costs to as low a level as possible to ride out anything that may come in the way of a price shift.

Another manufacturer reported a surprisingly good dairy feed business—but couldn't put a finger on just what was bringing this about. Poultry feed volume still continues at a slow pace and beef feeds are in a fair state. Turkey feed production remains at a fairly high level.

While most ingredients held steady, soybean meal prices continued their rise, and alfalfa meal showed signs of a spurt.

The Minneapolis millfeed market was described as quiet, with little interest shown on the buying side. The market was helped by a rather sharp drop in production during the week ended July 7 because of the July 4 holiday period.

Northeast

Operations of formula feed manufacturers held at a relatively low level as demand failed to pick up after the holiday. One trade source said some easing in the prices of end products, plus farmers' preoccupation with their crops may have contributed to the poor showing.

Eggs were off a little. Demand in the western New York area was slow and the market barely steady. On-the-farm prices of large white eggs in the area were quoted at 38@41¢ doz.

Broilers also gave a little ground. A low of 15¢ lb. showed up in the East. The high was a little over 18¢ and the average return was 16¢.

Pastures, as the summer gains momentum, are none too good but dairy feed demand was only ordinary.

Egg mashes continued to be the mainstay of sales, followed by growing feeds, dairy and broiler feeds.

The ingredient market, with a few exceptions, was weak.

Southeast

The broiler feed business continues to improve slightly each week, and many believe that it will continue to improve during the coming weeks. Cattle and dairy feed business remains practically unchanged. North Georgia broiler prices were generally unchanged and sales were made from 16@16½¢ lb. f.o.b. the farm.

With feed prices slightly lower, good broiler raisers are able to realize a small profit. Chick placements were reported slightly higher in most of the southeastern states.

With an embargo placed on barges at New Orleans this week, many barge loads of corn moved into Guntersville, Ala. and Chattanooga, Tenn. terminals. With heavy supplies and only fair demand, corn prices dropped as much as 6¢ bu., delivered middle Georgia points.

Practically no demand and good supplies dropped soybean meal prices as much as $1.50 ton this week. Cottonseed meal increased $2 ton due to very limited supplies. Major feed ingredient buyers continue to buy their requirements on an as-needed basis.

Central States

Generally speaking, there seems to be more unanimity of opinion among mixed feed manufacturers in this area on the state of the market than was the case during June. Most apparently feel that the turn of the feed year finds a rather unsatisfactory demand for their product—although none is actually pessimistic over the forward outlook.

Demand for all classes of commercial feeds seems to have tapered off all along the line. The big increase in the prospective hog population carries promise of a pickup in commercial feed demand, provided, of course, that hog prices do not break too far and too fast.

South Central

Formula feed business continues good, with sales volume about equal to that of last week. Mills have no difficulty in maintaining five-day runs, and in a few instances two shifts are operated.

Business coming in leans heavily to hog feeds with deliveries on this item even better than last year. Although marketing returns from barrows and gilts average about $6.80 cwt. less than the same period a year ago, feeding ratios are still considered good.

Layer feed demand is only fair. Increased egg prices have had no noticeable effect on sales. Grower rations are of moderate total, reflecting the reduced number of farm flocks in the area. Good pasturage continues to restrict the need for dairy and cattle feeds.

Ohio Valley

With the major holidays now out of the way until the long Labor Day week end, area manufacturers of formula feeds reported production in steady schedules this week, aided by a modest buying splurge in the face of stiffening prices for such ingredients as soybean and cottonseed oil meals. Hog feeds continue in most demand, and some pickup was noted this week in sales of turkey feeds.

Fortunately, the extremely hot

(Turn to **MARKETS**, page 115)

our service and products help you produce

BETTER FEEDS

Peter Hand Research Farm

- **Progressive nutritional research**
- **Practical farm testing and evaluation**

The often-dramatic new developments of science hold the answers to many of your practical problems. Yet, most feed nutritionists and manufacturers simply do not have the time and facilities to test and evaluate all these discoveries for themselves. Today, Peter Hand can greatly expand your testing program and expedite your evaluation of these new developments.

The Peter Hand Foundation acts as your clearing house on nutritional developments. We study and develop formulas and products for you, based on work at our own research farm and laboratory, and upon latest findings from universities. Current research results from all sources are evaluated by the Foundation staff. These developments are then further studied under practical conditions at our applied research farm.

Consider The Peter Hand Foundation as part of *your own* research program, ready to serve you now!

Check the products that interest you and mail this coupon now. We will be happy to send you full information.

PETER HAND FOUNDATION

Division Peter Hand Brewery Co. © 1959 P.H.B. Co. Dept. F-7-11

1000 W. North Ave., Chicago 22, Ill. • MOhawk 4-6300

- ☐ **Peter Hand FW-Premixes** (Vitamins-Antibiotics-Unidentified Growth Factors)
- ☐ **Peter Hand Proven Premixes** (5 and 10 lb. batch size)
- ☐ **Peter Hand Aqua Solva—** Water Soluble Vitamins and Antibiotics
- ☐ **P.H. Vitamin A**
- ☐ **P.H. Vitamin D_2**
- ☐ **P.H. Vitamin D_3**
- ☐ **P.H. Vitamin E**
- ☐ **P.H. Riboflavin**
- ☐ **P.H. Pantothenic Acid**
- ☐ **P.H. Choline Chloride**
- ☐ **P.H. Komplex K**
- ☐ **P.H. Vitamin B_{12}**
- ☐ **P.H. Pepsin**
- ☐ **P.H. Arsanilic Acid**
- ☐ **P.H. Procaine Penicillin**
- ☐ **P.H. Bacitracin**
- ☐ **B.H.T.** (Koppers)
- ☐ **Methionine** (Du Pont)
- ☐ **Lipamone** (White Laboratories)
- ☐ **Rumen Microorganisms** (Natural and cultured)
- ☐ **GP 101 with Multiferm** (Unidentified Growth Factors)
- ☐ **Custom Premixes** (To your exacting specifications)

Peter Hand Foundation, 1000 W. North Ave., Chicago 22, Ill.

Please send information on the items checked above to:

NAME ..... TITLE.....

COMPANY NAME .....

ADDRESS .....

CITY..... ZONE..... STATE.....

400 Register for Canadian Event; President Elected

TORONTO, ONT.—W. G. Cunningham, Toronto, was named national council president, and W. N. Hendrick, Toronto, was named to continue as general secretary of the Canadian Feed Manufacturers Assn. at the group's recent annual convention in Muskoka, Ont. Mr. Cunningham succeeds J. D. Lyons, Winnipeg. Registration for the convention was a record high of nearly 400.

Program speakers included Dr. J. L. Krider, vice president and director of public relations, Central Soya Co., Inc., Ft. Wayne, Ind.; Dr. J. M. Snyder, director of poultry research, Beacon Milling Co., Cayuga, N.Y.; Prof. J. R. Cavers, head of the department of poultry husbandry, Ontario Agricultural College; R. K. Bennett, Canada Department of Agriculture; Ralph Everett, Empire Sales Training, Inc., Miami, Fla., and Dr. C. F. Chappel, Eli Lilly & Co., Indianapolis.

Sessions were chaired by James F. Lowe, Dr. W. D. Morrison and Norman D. Hogg.

(Several of the addresses were reviewed in Feedstuffs July 4, page 8.)

One event of the convention was a luncheon honoring a number of association charter members — J. M. Appleton, F. D. Baird, M. F. Cohn, H. C. Cook, A. R. Cooper, Prof. E. W. Crampton, A. Cunningham, J. G. Davidson, J. de Brein, A. G. Douglas, W. N. Hendrick, N. D. Hogg, L. R. Merleau, J. E. McRostie, T. J. Payne, G. E. Peirce, F. W. Presant, G. A. Schell, R. A. Stone, J. G. Wharry, W. R. White and H. J. Willcock.

Special reference was made to J. E. McRostie who was responsible for calling the first meeting of feed manufacturers in 1929, and to W. R. White who served with the Canadian Department of Agriculture at the time of the founding of the association. To mark the occasion, a history of the CFMA entitled, "The Feed Industry 1812 to 1959" was distributed to members.

The convention marked the 30th anniversary of the association, and the attendance was a record high.

Broiler Egg Settings Again Show Drop; Delmarva Price Off

SALISBURY, MD.—After several weeks of gradual improvement in broiler prices, the price fell again last week. The average price paid on the farm in Delmarva last week was 17.38¢ lb., compared to 18.02¢ the week before.

Perhaps the reason the Delmarva price fell is because of the increased number of birds going to market. Local producers sent 3,813,000 birds to market. This was the same as the previous week but 8% more than a year ago.

Nationwide, for 22 reporting states, hatcherymen set 45,846,000 eggs. This was slightly less than the previous week and 4% less than the corresponding week a year ago. Decreases in the number of eggs set from the previous week were reported in 10 of the 22 states. The sharpest decreases from the previous week occurred in Georgia, Mississippi and Delaware.

Chick placements in the 22 states totaled 33,673,000. This was slightly more than the previous week but 5% below the corresponding week a year ago. Increases were reported for nine states — decreases for 13 states, compared with the previous week. The largest increases from the previous week occurred in Arkansas and Mississippi.

Feed Companies Book Alfalfa Ahead

KANSAS CITY—With the dehydrated alfalfa market displaying a strong tone, several feed manufacturers entered the market this week to book their needs or at least a portion of their needs until new crop time. July through April sales of 17% protein 100,000 units vitamin A guaranteed pellets in bulk were reportedly made at prices ranging from $47 to $50 ton, Kansas City. Sales for shorter and later periods were said to be for closer to the $50 level.

Currently pellets are being quoted at $38, but there are indications that prices could advance $1 to $2 next week, blenders report. Demand has been good and current shipments are hard-pressed to keep up with orders.

The higher prices for forward bookings represent storage, interest and in and out charges.

Veterinary-Nutrition Conference Series Planned in Missouri

KANSAS CITY—A series of veterinary-nutrition conferences for veterinarians and feed men has been scheduled in Missouri through sponsorship of the Midwest Feed Manufacturers Assn., Missouri Grain & Feed Dealers Assn. and the Missouri Veterinary Medical Assn.

The schedule is as follows: July 30, Cape Girardeau (Hotel Marquette); July 31, Springfield (Kentwood Arms Hotel); Aug. 1 Sedalia (Homestead Hotel); Aug. 3, Kirksville (Travelers Hotel), and Aug. 4, St. Joseph (Hotel Robidoux). After each meeting there will be a social hour and a banquet starting at 6:30 p.m.

Speakers at the Cape Girardeau meeting will include Dr. James C. McCrea, chairman of the feed industry committee, MVMA; Lloyd S. Larson, executive vice president of MFMA; Maxwell Cooley, Hoffman-Taff, Inc., Springfield, and Herbert C. Schaefer, Ralston Purina Co., St. Louis. Prof. Clarence E. Klingner, agricultural economist from the University of Missouri, will discuss integration and contract farming as it affects the feed and veterinary businesses.

Dr. Lawrence W. Price, Hales & Hunter, Chicago, will discuss nutrition developments at the Springfield meeting, and Dr. C. M. Cooper, editor of Veterinary Medicine, Kansas City, will talk about feed medication prescriptions. Dr. McCrea, Mr. Larson, Mr. Cooley and Prof. Klingner will again appear on the program. O. J. Nicholson, Ozark Beauty Feed Mill, Monett, Mo., will be toastmaster at the evening banquet.

At the Sedalia meeting, Dr. McCrea, Mr. Larson, Prof. Klingner and Mr. Cooley will again appear as speakers. Dr. A. H. Groth, dean of the School of Veterinary Medicine at the University of Missouri, will discuss veterinarian-feed dealer relationships, and Elmer Modeer, Staley Milling Co., Kansas City, will talk about recent developments in nutrition.

Maurice Wells, vice president in charge of nutrition for Waterloo (Iowa) Mills, will discuss nutrition at the Kirksville meeting. Dr. McCrea, Mr. Larson, Prof. Klingner and Mr. Cooley will again appear on the program.

At the St. Joseph meeting Dr. James K. Farrell, past president of the MVMA, will appear on the program with Mr. Larson. Dr. Cloy Knodt of the Cargill-Nutrena Research Farm at Elk River, Minn., will discuss recent developments in nutrition. Mr. Cooley and Prof. Klingner will also speak.

CORN CROP FORECAST AT 4.25 BILLION

WASHINGTON—U.S. Department of Agriculture is now forecasting a corn crop at approximately 4.25 billion bushels for this year. Corn stocks on farms are estimated at 1.1 billion bushels; in the North Central States stocks are said to be better than 980 million. Corn disappearance during the April-July quarter is now estimated at more than 700 million bushels.

Soybean acreage is now reflecting its first decline, according to USDA, with an estimated planted acreage of 22.9 million. Reductions are reflected primarily in Minnesota and Iowa. Soybean stocks on farms are said to be, as of July 1, 35.4 million bushels, and are concentrated in the North Central area. April-July disappearance of beans is now reported as 89.2 million, a reduction from last year. This week officials of the crusher industry said that for the June crush it is probable that use of beans by crushers will be off by about 10% from the previous month due to close-downs in marginal crushing plants.

New Pelleting Plant Being Constructed

LAKEVIEW, ORE. — Construction is progressing on the feed pellet mill at Williams Farm Commodities in Lakeview. The project has been underway since February, and is expected to be completed soon. Contractors are currently installing hopper bins, pellet machines, mixers and coolers.

Managers Frayne and Ralph Williams say that with the new facility they will be able to produce a straight alfalfa pellet, alfalfa-grain pellet and grain concentrate pellet for cattle, swine and poultry. Capacity of the plant will be 30 tons in an eight hour shift.

PLANNING COMMITTEE—Shown are members of the planning committee for the veterinary-nutrition meetings scheduled for July 30-31, and Aug. 1, 3 and 4, and sponsored by the Missouri Veterinary Medical Assn., Missouri Grain & Feed Dealers Assn. and the Midwest Feed Manufacturers Assn. They are (left to right): Lloyd S. Larson, executive vice president of the MFMA; Dr. James McCrea, veterinarian from Platte City, Mo.; Dick Meinershagen, executive secretary of the Missouri Feed & Seed Assn.; Ruby Green, Ruby Green, Inc., Kirksville, Mo.; Clarence Schlimpert, Jackson, Mo.; Dr. James Farrell, veterinarian from Boonville, Mo., and Dr. Richard Orr, veterinarian from Aurora, Mo.

3.9-Billion-Bushel Corn Crop Forecast

CHICAGO—The July 1 estimate on corn compiled by C. M. Galvin, veteran private crop expert, intimates an out-turn of 3.9 billion bushels for 1959. If this preliminary determination stands up, it would mean a corn crop that would exceed last year's record by some 100 million bushels.

Mr. Galvin says the corn went into the ground this spring under generally favorable conditions, especially in the central Corn Belt states, and has made excellent progress since then with a July 1 condition figure of 88% of normal, four percentage points better than the same date last year. Not only is the condition up from a year back, but the acreage for harvest at 81,193,000 is some 7¾ million acres bigger than the one harvested last year.

The big step-up in acreage sown this spring was due, of course, to the killing-off of all acreage allotments for this cereal, which constituted an invitation to Corn Belt farmers to "plant corn with both hands."

The Galvin figure on oats showed 1,164,341,000 bu. and is a close reflection of the deterioration reports that have been flowing in from the big producing areas for the past three weeks.

His estimate on soybeans at 532,795,000 bu. was a surprise to quite a few in the trade as they had been anticipating a higher figure and more closely approximating, but not actually reaching, last year's all-time record bean crop of 574,413,000 bu. Condition of the growing soybean crop was set by Mr. Galvin at 90% of normal against 87% a year ago.

Heads Quaker Dairy Cattle Feed Research

CHICAGO—The appointment of Dr. William L. Ensor as manager, dairy cattle feed research at the Quaker Oats Co.'s John Stuart Research Laboratories, Barrington, Ill., has been announced by Dr. W. R. Graham, director of research.

W. L. Ensor

Dr. Ensor will be responsible for all research on dairy cattle feed at the laboratories and at the Ful-O-Pep research farm. He will report to Dr. R. O. Nesheim, manager of livestock feed research.

Dr. Ensor is a native of Glencoe, Md., and received his Ph.D. degree in dairy husbandry from the University of Maryland. His recent research work at the University of Maryland in the field of ruminant nutrition has attracted international attention.

Marbut Milling Head Dies in Augusta, Ga.

AUGUSTA, GA.—Funeral services were held here July 8 for Harold C. (Hal) Marbut, 48, founder and president of Marbut Milling Co. Mr. Marbut, in ill health for several months and suffering from extreme depression, died July 7 of what was reported to have been a self-inflicted gunshot wound.

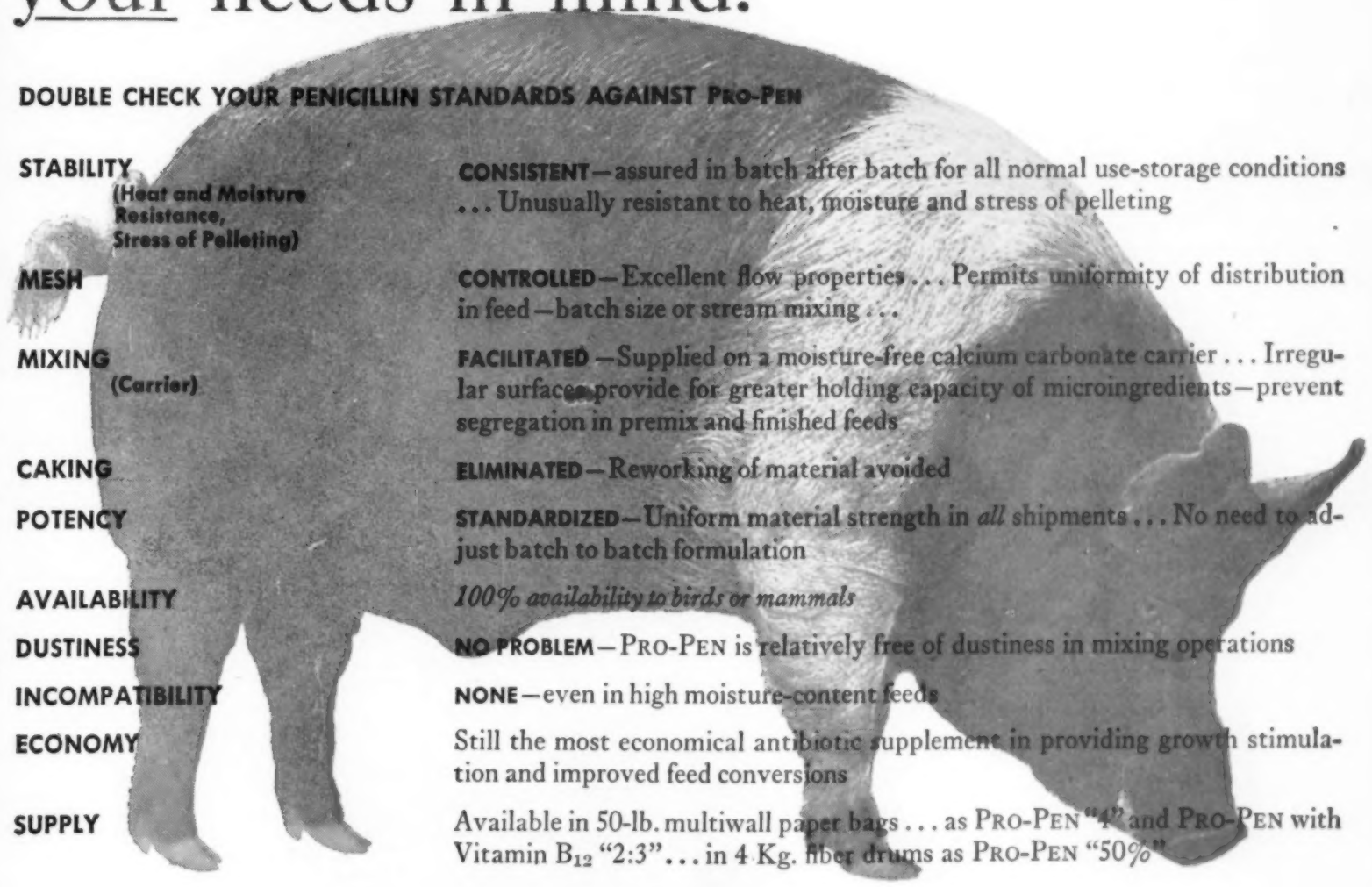
Mr. Marbut was a past president of the Augusta Exchange Club, and a past director of the Georgia Feed Assn. He was one of the first recipients of the University of Georgia poultry science award and had supported through the years four scholarships for poultry students at the university.

He is survived by his wife and two married daughters.

Charles K. Laurent, Marbut general manager, said there would be no change in the company's management and sales personnel.

Attention, Purchasing Agents!

Are you using a brand of procaine penicillin specifically designed for feed use? If not, place your next order for PRO-PEN—The Merck brand of procaine penicillin developed with your needs in mind.



DOUBLE CHECK YOUR PENICILLIN STANDARDS AGAINST PRO-PEN

STABILITY (Heat and Moisture Resistance, Stress of Pelleting)	**CONSISTENT**—assured in batch after batch for all normal use-storage conditions . . . Unusually resistant to heat, moisture and stress of pelleting
MESH	**CONTROLLED**—Excellent flow properties . . . Permits uniformity of distribution in feed—batch size or stream mixing . . .
MIXING (Carrier)	**FACILITATED**—Supplied on a moisture-free calcium carbonate carrier . . . Irregular surfaces provide for greater holding capacity of microingredients—prevent segregation in premix and finished feeds
CAKING	**ELIMINATED**—Reworking of material avoided
POTENCY	**STANDARDIZED**—Uniform material strength in *all* shipments . . . No need to adjust batch to batch formulation
AVAILABILITY	*100% availability to birds or mammals*
DUSTINESS	**NO PROBLEM**—PRO-PEN is relatively free of dustiness in mixing operations
INCOMPATIBILITY	**NONE**—even in high moisture-content feeds
ECONOMY	Still the most economical antibiotic supplement in providing growth stimulation and improved feed conversions
SUPPLY	Available in 50-lb. multiwall paper bags . . . as PRO-PEN "4" and PRO-PEN with Vitamin B_{12} "2:3" . . . in 4 Kg. fiber drums as PRO-PEN "50%"

PRO-PEN®

(PROCAINE PENICILLIN)

MERCK

developed expressly for feed use—

***with* THE MERCK MARGIN OF SURETY**

©MERCK & CO., INC.

Results of Swine Research Reported at Ohio Field Day

By DR. HOWARD S. TEAGUE
Animal Science Department
Ohio Agricultural Experiment Station

WOOSTER, OHIO — Animal and Poultry Health Day was held at the Ohio Agricultural Experiment Station July 8. This was a combined field day and emphasized research conducted in the departments of animal science (including swine, beef cattle and sheep), veterinary science, poultry science and dairy science.

Morning programs were scheduled in each of the several locations where experiments were being carried out. Visitors were able to view the experiments in progress and to hear brief discussions of the results presented. Throughout the day's program current aspects of disease problems facing the poultry and livestock producer were emphasized.

Results of swine feeding and management research related to several areas of production were reported. Brief highlights of these results are presented here:

Further Investigations of the Effect of Antibiotics and Other Antibacterial Agents in Feeds for Growing-Finishing Swine Fed Under Dry Lot, Deep Litter or Pasture Conditions: Results were presented of the second pasture and third and fourth dry lot trial in a series designed to determine the value of certain feed additives, primarily antibacterial agents, when fed at different levels, in combination, and under different feeding conditions.

On pasture pigs were fed the basal ration or the basal ration plus the following additives per ton of feed: 5 lb. of Hygromix, a combination of 10 gm. sulfaquinoxaline and 10 gm. streptomycin, 10 gm. Aureomycin, a combination of 10 gm. Aureomycin and 7.5 gm. zinc bacitracin and 2.5 gm. penicillin (the latter two antibiotics furnished as Baciferm—PB10), or the basal ration plus 30 parts per million of zinc.

From weaning to a weight of 120 lb. the inclusion of Hygromix resulted in an increase of 4.2% in growth rate and a saving of 22 lb. of feed per hundred pounds of gain. Its continued inclusion in the feed after pigs reached this weight appeared to depress performance. Pigs fed the combination of sulfaquinoxaline and streptomycin made the fastest gains followed by those fed a combination of Aureomycin, zinc bacitracin and penicillin. Aureomycin at the 10 gm. level and the inclusion of 30 parts per million of zinc failed to increase rate of gain.

All of the growth stimulation which appeared to result from the inclusion of the additives occurred during the period from weaning to a weight of approximately 120 lb. Similarly, even though all treatment groups required less feed per hundred pounds of gain over the entire feeding period, this saving in all but the group receiving 10 gm. Aureomycin was realized during the early growth phase.

In the two dry lot trials a comparison was made of feeding pigs on a built-up litter of ground corn cobs and where they were fed in adjacent concrete-floored pens cleaned daily. In each location replicate lots received either the basal ration or the basal ration plus the following additives per ton of feed: A combination of 10 gm. Aureomycin, 7.5 gm. zinc bacitracin and 2.5 gm. penicillin (the latter two antibiotics furnished as Baciferm-PB10) or 20 gm. of Aureomycin.

Pigs confined to the concrete-floored pens and consuming the same kind and level of antibiotic as those fed on deep litter showed a greater growth response to antibiotic supplementation. No increase in rate of gain resulted from antibiotic supplementation on deep litter during the growth period from 120 lb. to market weight.

In the spring and summer trial pigs fed the basal ration on deep litter gained 3% slower and required 14 lb. more feed per 100 lb. of gain than those fed in dry lot. However, in the fall and winter trial those on deep litter gained 8% faster and required 7 lb. less feed than those fed in concrete-floored pens.

Under dry lot conditions the addition of 30 parts per million of zinc did not result in improved pig performance. Fifteen grams of zinc bacitracin and 5 grams of penicillin as Baciferm-PB10 resulted in a 17.6 and 14.2% increase in growth rate in the first and second growth periods respectively. This was the greatest and most consistent growth response obtained. The addition of the same level of pure zinc bacitracin and crystalline penicillin to the basal ration did not increase growth rate, suggesting that the growth-stimulating factors present in the feed supplement are not the same as a similar level of zinc bacitracin and crystalline penicillin. A second trial is in progress.

Except for a small saving in feed, 90 grams of arsanilic acid per ton of feed failed to improve pig performance.

Palatability of Ingredients in Early Creep Feeds for Suckling Pigs: In four seasons pigs were offered a sim-

(Turn to OHIO, page 114)

Average Price Support For Wheat Given

WASHINGTON—The national average support price for 1959-crop wheat will be $1.81 bu., unchanged from the minimum "advance" support price announced May 1, 1958, the U.S. Department of Agriculture has announced.

Legislation requires that the final wheat support rate be determined on the basis of the wheat parity price as of the beginning of the marketing year, and of wheat supply relationships of the same date. Currently, wheat supply relationships indicate a support level at 75% of parity.

NEW HEADQUARTERS BUILDING—Approximately 5,000 persons viewed this new headquarters office building of Moorman Manufacturing Co., Quincy, during a recent open house. The two-level building, in a landscaped and terraced setting, houses the latest in filing and payroll processing equipment. Air conditioning is controlled by a large central panel for 10 different zones.

New England Firm President Resigns

BOSTON, MASS.—W. M. Andersen, who has been associated with the feed industry for more than 30 years, has resigned as president of New England By-Products Corp. He said he will spend the next few months fishing and gardening.

W. M. Andersen

Mr. Andersen began his feed career with the Albert Dickinson Co., Chicago, and is one of the famed "Abbott Alumni" group. From there he joined Kraft Foods in the specialties divisions, and then went on to White Laboratories, Newark, N.J.

He served as divisional representative for New England By-Products, Philadelphia, before being moved to Boston as sales manager. Mr. Andersen also served as a member of the National Poultry Advisory Council.

While serving as recording secretary of Neppco he was named "Man of the Year" by the Hatchery Tribune. He served the northeastern feed industry as secretary of the New England Feedmen for 10 years. At present he is a member of the transportation committee of the National Fisheries Institute.

In the last few years Mr. Andersen has promoted feather meal and dried potato pulp. More recently he has been promoting a by-product of raw hides.

Oilseed Meal Futures Price Trend Slips

MEMPHIS, TENN.—Some profit-taking and a slow demand for the cash article combined to bring oilseed meal futures prices mostly downward on the Memphis Board of Trade the past week, compared with a week earlier.

With cash business light the last few sessions, futures suffered a dip as profit-taking entered the market at higher levels. Early in the period, cash trading was said to be improved over recent days, then it eased off.

Mixed feed business continued good, with prospects bright for the future, brokers said. They added that prices of eggs and broilers have shown some improvement, promising to help stimulate a better feed demand in weeks ahead.

Unrestricted soybean oil meal closed 25¢@$1.50 ton lower than the previous week, while bulk solvent cottonseed oil meal was unchanged to $1.25 higher.

Trading for the period, cut short by an Independence Day observance on Friday, amounted to 1,400 tons of unrestricted soybean oil meal and 400 tons of bulk solvent cottonseed oil meal.

Egg Processing Plant

GREENWOOD, MISS.—Southern Farms, Inc., announced the opening of a plant to grade and candle eggs at Itta Bena, Miss.

J. M. Denton, Shelby, Miss., president of Southern Farms, said full production should be under way by Oct. 15, with a maximum employment of 30 people.

Eggs will be sold under the trade name of Cotton Bowl eggs in the surrounding territory. All eggs will come from farmers in the Delta area of Itta Bena. At full production, 1,400,000 eggs a week will be processed at the plant.

Burrus Dividend

DALLAS, TEXAS—Burrus Mills, Inc., Dallas, has declared a dividend of $3 a share on common stock of the company. This is the first common dividend paid since 1955.

Organization Changes Made by Quaker Oats

CHICAGO—A number of division consolidations and administrative changes in the Ful-O-Pep feed division of The Quaker Oats Co., Chicago, have been announced by I. S. Riggs, vice president.

The Lawrenceburg, Ind., feed division has been consolidated with the eastern feed division at Shiremanstown, Pa. Roger A. Morrison, former manager of the Lawrenceburg division, has been named eastern division manager, replacing C. E. Gaw, who has resigned.

B. P. Beckerdite has been named district sales manager, Lawrenceburg district, and A. J. O'Donovan has been appointed poultry and marketing specialist for the new eastern division. Both will report to Mr. Morrison.

The Tampa, Fla., feed division has been consolidated with the southeastern feed division with headquarters in Chattanooga, Tenn. W. B. Carden will continue as southeastern feed division manager. S. T. Maddox is district sales manager of the Chattanooga district.

B. O. Ahlstrom has been appointed sales manager, Tampa district, and H. T. Mills has been assigned the local Tampa territory as a district representative. Mr. Maddox and Mr. Ahlstrom will report to Mr. Carden.

The name of the Sherman, Texas, feed division, managed by H. W. Crutchfield, has been changed to the southwest feed division. And, the St. Joseph, Mo., feed division, managed by R. N. Ammon, will be known as the midwest feed division.

Division managers will report to J. C. Huckabee, general sales manager of feed products.

Dairy Feed Co-op Formed in California

PETALUMA, CAL.—A new cooperative organization that will manufacture and distribute dairy feed to its members has been formed at Petaluma. It is the Dairy's Feed & Supply Cooperative.

The organization said it has 32 charter members and that membership is open to others. Roland Matteri was elected president of the cooperative; vice president is L. W. Hepworth, and secretary-treasurer is Angelo Dotti. Directors are Keegan Watson, William Caccina, Robert Raffo, John Kayman, Nelson Santos, Martin Witt, Leo Varzelli and John Mattos.

Davis Soren, who has been in the feed business at Petaluma since 1933 and owns the D. Soren Grain & Feed Co., will be manager of the cooperative, which will take over and use the Soren plant.

The formation of the cooperative has been under way about a year, Mr. Soren said, with the organizers working toward dairy members representing about 6,000 cows as a minimum. Mr. Soren said his plant has the capacity to feed 10,000 cows and will expand as membership in the cooperative grows.

Upjohn Files Petition For Mastitis Product

WASHINGTON—The Food & Drug Administration reports that the Upjohn Co., Kalamazoo, Mich., has filed a petition for issuance of a regulation, under the food additive law, dealing with the use of a penicillin mastitis product.

FDA said the petition proposes the issuance of a regulation to establish a zero tolerance for a preparation containing procaine penicillin, neomycin, polymyxin, hydrocortisone acetate and hydrocortisone sodium succinate in milk from dairy cows to which this preparation has been administered, either in oil or as an ointment, by the intramammary route for the treatment of mastitis.

AFMA Booklet On Ag Changes Now Available

CHICAGO—Just where are animal agriculture and the feed industry going in this era of transition? What is likely to be the role of the feed manufacturer in the production and marketing of eggs, pork and broilers? Just how fast will integration develop in eggs and pork, for example? What will be area differences? How will the status of the feed industry and individual feed firms change?

Answers and comments to and on these and many more questions were provided in a closed circuit television program at the 1959 convention of the American Feed Manufacturers Assn. (Feedstuffs, May 16).

The subject "Agriculture in Transition" was discussed by panels of experts on production, processing and marketing of eggs, broilers and pork.

After the commodity discussions, three "interpreters"—two feed executives and an agricultural economist—discussed the significance of the panel members' conclusions, particularly as they apply to the feed industry.

A printed summary of this discussion is now available in the form of a booklet published by the American Feed Manufacturers Assn., 53 W. Jackson Blvd., Chicago 4, Ill. Copies of the booklet may be obtained at a price of 17¢ per copy, the cost of printing and mailing, by writing to Oakley M. Ray, director of market research, at the AFMA office.

Quotations

Here are a few excerpted quotes from the booklet:

Egg grader and distributor: "Today we manufacture eggs, and feed is the raw material. The big question is who is going to do it . . . I favor the feed manufacturer as the one who should take over and manufacture the raw material into the finished product."

Egg buyer for food chain: "Too many feed companies have started ill-advised egg production out on the sand dunes in marginal areas, and it appears to be for the primary reason of selling feed. There seems to be no thought as to what is to become of the end product—the eggs produced."

Large egg producer with hatchery and feed mill: "We can produce eggs at least 3¢ doz. cheaper in Indiana than in New York or New Jersey. I think producers in the New York-New Jersey area are going to have more problems than we have . . . I certainly think the egg business is going to go through some of the same changes that the broiler business has gone through."

Packing company swine specialist: "If the integrated operators produce good, lean-type hogs, they are going to have a good market and that may help integration to spread in some areas."

Swine growers' group official: "I doubt if integration has accounted for as much as 1,000 head of hogs in the Corn Belt . . . I am sure that the South is going to produce more hogs.

(Turn to AFMA, page 114)

Ehrsam Firm Appoints New Sales Manager

ENTERPRISE, KANSAS—The J. B. Ehrsam & Sons Manufacturing Co. of Enterprise has announced the appointment of John J. McGlone as sales manager.

John J. McGlone

Mr. McGlone formerly was vice president of the Wellman Engineering Co. of Cleveland, Ohio.

He is a native of Minnesota and has a degree in electrical engineering from the University of Minnesota.

BIG SPECIFICATION TURKEY PLAN LAUNCHED

SONOMA, CAL.—A recent development in turkey production is adding fuel to the specification buying trend spreading in foods.

Nicholas Turkey News, published by Nicholas Turkey Breeding Farms, Sonoma, reports that the largest specification turkey growing program in California will start sending toms to market July 20. The bulletin says the operation plans to supply toms in quantity during August, September and October.

The price paid to the grower and the specified weight the toms must weigh were contracted for before poults were placed in brooder houses. Contracts stipulate that the toms must weigh a minimum of 24 lb. and the grower will receive 22¢ lb. live ranch weight.

The bulletin also notes that it has been predicted that specification buyers will control up to 90% of the grocery market in 2-5 years.

Gooch Red Circle Sale Scheduled July 24-25

BROOKVILLE, KANSAS—The CK Ranch near here is preparing for the eighth annual Gooch Red Circle auction to be held July 24-25, sponsored by John J. Vanier, president of the Gooch Feed Mill Co.

Youngsters participating in the auction will have an opportunity to own one of the 90 calves and gilts to be offered for sale. The animals are all purebred, and many of them are sired by champions from the CK Ranch herds, according to a release by the Gooch company.

"The boys and girls who have taken home Hereford and Holstein calves and Hampshire gilts from past Red Circle auctions have proved that with proper feeding and grooming they can raise champions of their own," said company officials.

Successful bidders from the previous year compete for cash prizes and a top award of a college scholarship by showing the progress they made with their purchases.

No money is involved at the auction, according to the Gooch release. The youngsters bid for the livestock and 10 sewing machines with Red Circle points from bags or packages of Gooch's Best Foods or Feeds. Special "credit buying" enables youngsters who got a late start in saving the points to participate in the auction.

Last year 5,000 youngsters and adults from 10 states attended the two-day event.

Feed Mill Manager At Buffalo Retires

WEST SPRINGFIELD, MASS.—The retirement of W. P. Frost, mill manager of the Eastern States Farmers Exchange feed mill at Buffalo, was announced recently in the Eastern States Cooperator, publication of the cooperative.

Mr. Frost served as a fieldman in Connecticut starting in 1924; and for the past 29 years has been located at the Buffalo feed mill. He was mill manager from 1931 until his retirement.

The Eastern States Cooperator said, "Under his guidance Eastern States feed production plants have been developed into highly efficient units capable of meeting the exacting requirements of today's formulations."

Pennsylvania Group Appoints Secretary

EPHRATA, PA.—Donald W. Parke has been appointed executive secretary of the Pennsylvania Millers & Feed Dealers Assn., announced Robert I. Aten, association president. Mr. Parke succeeds Richard Ammon, who resigned to accept a similar position with the Northeastern Poultry Producers Council.

Donald W. Parke

For the past 13 years Mr. Parke has been field secretary and assistant to the managing director of the Pennsylvania Retailers Assn. with headquarters in Lancaster, Pa. He has also been active in national trade circles, and is currently serving a term as director of the American Retail Association Executives. He is a graduate of Duke University.

Commenting on Mr. Parke's selection, Mr. Aten stated that he was the unanimous choice of the board of directors after extensive screening and interviewing of over a dozen candidates. "In Mr. Parke," he added, "we have a man with the experience, the ability and the ambition to not only carry on the excellent program of benefits and services developed over the past eight years by the association under the guidance of Dick Ammon, but to expand this program and move forward into new areas of service to our members."

Grain Exports

STOCKTON, CAL.—The Bureau of Field Crops inspection station at Stockton reports the issuance of 30,080 certificates during the fiscal year ending June 30, 1959. These certificates covered truck, rail and ship inspections for feed grains, wheat, rice and beans.

The month of June saw the highest tonnage of barley for export through the Port of Stockton for a single month, according to the Stockton Grain Exchange. Twelve vessels called at the inland port to load between 90,000 and 100,000 tons of barley. Ship scheduling was well done with a minimum of congestion.

POULTRY PLANT OPENS

CLAXTON, GA. — The Claxton Poultry Co., Inc., recently held an open house at its modern new poultry processing plant in Claxton. With W. F. Gailey, plant president, in charge, visitors were taken on tours of the plant throughout the day. Mr. Gailey described the plant as "one of the finest." Norman W. Fries, Savannah, Ga., businessman, is vice president of the concern.

Small Mill Short Course Scheduled For Sept. 26

KANSAS CITY—A small mill short course will be held again this year in Kansas City in connection with the annual Feed Production School.

The regular school will take place Sept. 23-25 at the Continental Hotel, and the short course—designed for operators of custom mills and other smaller mills—will be presented at a one-day gathering on Saturday, Sept. 26.

Both events are sponsored by Feed Production School, Inc., a non-profit corporation formed this year to sponsor the production school and feed milling research.

Final plans for both the three-day production school and the short course are now being worked out, with the school committee meeting again next week.

Kenneth Winterscheidt of the Winterscheidt Milling Co., Seneca, Kansas, a member of the production school committee, is chairman of the small mill short course.

Mr. Winterscheidt said the short course is tailored to the requirements of the mill operator who produces about 50 tons per day and probably has plans for expansion, too.

Pelleting

Various aspects of pelleting and costs of pelleting will be stressed at the main production school, and in the short course for small mill operators there also will be considerable attention to pelleting.

Also to be discussed will be such things as mill design and building, financing of mills and new equipment, concentrate and premix mixing programs, quality and inventory control, preventive maintenance and portable milling.

The speakers will be experts from feed firms, equipment companies, building firms and educational institutions.

The pelleting discussions at the short course will cover such things as costs, steam requirements, cooling, mash conditioning, bin design for pellets and conveying hot pellets.

The speakers also will discuss the relatively new field of pelleting of roughage and complete rations for ruminants.

Question and answer sessions will be part of the program.

A new feature will be consulting booth areas in the Continental Hotel. Students will have an opportunity to discuss problems with suppliers to the industry.

Inquiries regarding the 1959 Feed Production School and the short course are to be directed to Feed Production School, Inc., 20 W. 9th St. Bldg., Kansas City 5, Mo.

Tastelation® BASIC-9 DOG FOOD PREMIX
Saves you TIME and MONEY. Send for full details.
TASTE ENGINEERING, INC.
1401 West Hubbard Street Chicago 22, Illinois
MOnroe 6-5255
Manufacturers • Importers • Distributors

NO FLOURING — MAKES FOR MORE NUTRITIOUS, MORE DIGESTIBLE FEEDS
SIMPLE SENSIBLE AUTOMATION
SLASHES FEED COSTS TO THE BONE. RUNS BY TRACTOR P. T. O. OR ELECTRIC MOTOR. Banishes guesswork and uncertainty in feeds and feeding. Granulates all materials without flouring, the modern way. May also be had with Krimper-Kracker Grain Roller.
NEW! STATIONARY OR PORTABLE LOW-COST SELF-CONTAINED FEED PLANT
A unique consolidation of two famous feed processing units, Davis Feed Mixer and Davis Feed Granulator. A TRUE PROFESSIONAL INSTRUMENT FOR ONLY $1225.00.
Capacity 2 tons hourly. Other sizes handle largest requirements.
DISCHARGES ON FLOOR OR INTO ELEVATOR
100% Precision Batch Mixing on hay, cobs, ear corn, grains, LIQUID MOLASSES, FISH OILS, AUREOMYCIN, supplements, concentrates or any fortifier.
WRITE FOR LARGE FREE CATALOG ON Davis 65th Anniversary Milling Equipment
DAVIS MFG. CO., INC., Dept. FS-186 BONNER SPRINGS, KANSAS Established 1894

'Best Days Ahead' For SBOM Market, News Letter Says

MINNEAPOLIS—The opinion that the "soybean oil meal market has its best days of the current year just ahead" was expressed this week by Louis Brewster, manager, operations control, oilseeds division, General Mills, Inc. He said in a market news letter that there will be a tighter SBOM supply - demand picture throughout the remainder of the crop year.

Mr. Brewster's analysis of the SBOM situation brought out these points:

- Soybean oil meal stocks are relatively small—about five days' crush.
- Margins to the processor have forced him to reduce his volume of crush.
- There is no burdensome supply of substitutes available — cottonseed meal, tankage and meatscrap production usually declines during the summer months.
- The large number of animal units being fed at this time will continue to demand high protein feeds in order to prepare them for market as fast as possible to take advantage of any slight seasonal upturn in the market.
- Once the processor pulls the switch the first time, cutting back his production, it is always easier to do so again if margins are not at least breakeven.
- The soybean oil market still seems to be going no where and little relief to margins can be expected here.
- Soybean supplies for remainder of this crop year will have to come from CCC and the formula price cannot be reduced from current levels. There may even be some regional shortages of beans, thus, possible regional price increases for SBOM.
- Export demand for SBOM has been excellent all this year and can be expected to maintain its current level and will take up any slack that might develop in domestic usage.

(Feedstuffs reported in its July 4 issue that plant shutdowns, because of low margins, had shorted supplies and soybean oil meal prices had advanced nearly 20% since June 15. One observer was quoted as saying there was still room for further advances in soybean meal prices.)

Mr. Brewster said in his report dated July 6 that farmers feeding broilers and swine will demand feeds to carry out what they have started and mixers will have to do whatever is possible to supply them. "With demand at the current level, SBOM will be in short supply during this last quarter of the crop year," Mr. Brewster observed.

Assuming a crush of 31 million bushels monthly July-September and exports of about 10 million bushels a

(Turn to SOYBEAN MEAL, page 109)

Ray Bowden Assumes Texas Group Post

FT. WORTH, TEXAS—Ray B. Bowden has assumed his duties as secretary-treasurer of the Texas Grain & Feed Assn., which recently opened an office at 407 Fort Worth Club Building, Ft. Worth.

Mr. Bowden was executive vice president of the Grain & Feed Dealers National Assn. for 22 years. He and Mrs. Bowden have recently returned from a trip to Europe.

On May 1, the Texas Grain & Feed Dealers Assn. merged with the Texas Feed Manufacturers Assn., with a membership of over 800. Ben M. Ferguson had been part-time secretary of the grain dealers' association for the past nine years, but the enlarged membership required the services of a full-time secretary-treasurer.

Walter Blanton, Blanton Grain Co., Carrollton, Texas, is president of the association.

Find Clue to Mystery Of Poultry Diseases

CHARLES CITY, IOWA—Recent findings at Dr. Salsbury's Laboratories here indicate that researchers have found a clue to why there are outbreaks of poultry respiratory diseases even when the diagnostic laboratory has been unable to find the viruses that cause the diseases.

Dr. Peter H. Matisheck, Dr. Milan Mitrovic, Dr. Reed R. Rumsey and Vernon A. Hobert reported in the current issue of Avian Diseases that they have found the viruses in a part of the intestine of affected birds when they could not be found in the respiratory tract.

The national quarterly magazine article describes the technique used by researchers for isolating the viruses of fowl pox, Newcastle disease, laryngotracheitis and some unidentified viruses. The virus of infectious bronchitis was found by the group after publication of the article.

The researchers reported that they were able to isolate viruses from part of the intestine in 44 out of 88 cases. (More than one type of virus was isolated from many birds.) In acute cases of the disease they were able to isolate the viruses from both the respiratory tract and part of the intestine. But in chronic cases of the disease they were able to isolate the viruses from part of the intestine only.

The Avian Diseases magazine is published for scientists interested in diseases of fowl.

Don Butler in New Consulting, Sales Firm

DAYTON, OHIO — Don Butler, former official of Cargill, Inc., Minneapolis, has returned to his native Dayton, Ohio, to become vice president in charge of sales for a new business consulting and sales development company.

The new company is Creative Service Associates, Inc., which has been formed by a group of management and sales executives to analyze the problems of business clients and to set up corrective procedures.

Mr. Butler entered the feed industry in 1950. He was with Central Soya Co. and McMillen Feed Mills, Ft. Wayne, Ind., from 1950 to 1957. He started as a salesman and a year later became assistant to the vice president for sales. The following year he was named sales promotion manager and later advertising and sales promotion manager.

He joined Cargill in 1957 as sales manager of the hybrid corn department and became general manager of the department a year later. Early this year he was made general manager of consumer products, research and product development division.

Mr. Butler is a 1947 business administration graduate of the University of Dayton, and in 1949 received his master's degree at Harvard Graduate School of Business Administration. For a year he was assistant professor of sales management, salesmanship and retail merchandising at the University of Dayton before going to Ft. Wayne.

Mrs. Cherbonnier Dies

ST. LOUIS—Mrs. E. G. Cherbonnier, 71, wife of the feed advisor to the Grain & Feed Dealers National Assn., died July 3 at Barnes Hospital, St. Louis. Services were held July 6 at St. Michael and St. George's Episcopal Church, with burial at Bellefontaine Cemetery.

She is survived by her husband; a son, the Rev. Edmund L. Cherbonnier, Hartford Conn.; two daughters, Mrs. William Knowles and Miss Adelaide Cherbonnier, St. Louis, and a sister, Mrs. Harold Short, Summit, N.J.

Red Foley

A. L. Andrews

Red Foley Key Figure In Hess & Clark Egg Promotion Campaign

ASHLAND, OHIO—A year-'round campaign to promote "The Golden Goodness of Eggs" will be launched by Hess & Clark, division of Vick Chemical Co., at the American Poultry & Hatchery Federation convention in St. Louis, July 21-23.

Plans for the national program were announced by Dr. Aaron L. Andrews, feed products manager in Ashland, Ohio.

Key figure in the national program will be "America's Favorite Country Music Man"—Red Foley, radio, television and recording star. Beginning Aug. 8, Red will urge his NBC "Monitor" radio network audience to "Enjoy the Golden Goodness of Eggs." Hess & Clark is again sponsoring the Red Foley show on 140 stations in 48 states. According to independent surveys, the audience for this program is almost equally divided between urban and rural listeners.

According to Dr. Andrews, the "golden" theme is being initiated by Hess & Clark to encourage the public to eat more eggs and poultry throughout the year. He stated that "Even though our products (nitrofurazone and furazolidone) are several steps removed from the consuming public, we intend to do our part to increase sales for the poultry industry." Network commercial time will also be

(Turn to RED FOLEY, page 113)

Little Change in Commodity-Feed Ratios for June

WASHINGTON—Of the June farm commodity-feed price ratios of primary concern to the feed industry, only turkey-feed, egg-feed and butterfat-feed ratios showed any strength. But even they were only slightly above or the same as those for a month earlier. (See accompanying table.)

At mid-June, the U.S. Department of Agriculture computed the farm chicken-feed ratio at 3.0, off from May's 3.3 and the 4.6 ratio of June, 1958. The broiler-feed ratio was down at mid-June to 3.2 lb. of poultry feed equal in value to 1 lb. live bird. May's ratio was 3.3. And for June a year ago the figure was 4.2. June's egg-feed ratio, 7.3, was the same as May's, down considerably from the 9.7 ratio of June, 1958.

Improved chicken- and egg-feed ratios may be recorded for July with higher egg and broiler prices in the picture now.

The turkey-feed ratio for last month was up a notch to 6.6, as was the butterfat-feed ratio. The hog-corn ratio slumped to 12.9 at mid-June from the 13.5 mark of May. The June figure was far below the 18.2 ratio of June, 1958, but the depression was not so great compared to the 1948-57 average of 13.4.

USDA reported that the index of prices received by farmers during the month ended June 15 dropped 1% (3 points) to 242% of its 1910-14 average. Primarily responsible for the decline were lower prices for meat animals, wheat, most vegetable crops and milk.

The index of prices paid by farmers, including interest, taxes and farm wage rates declined 1 point during the month ended June 15. Prices paid for farm production goods declined

(Turn to PRICE RATIOS, page 113)

Farm Commodity-Feed Price Ratios

	U.S.	New Eng.	Mid-Atl.	East North Cent.	West North Cent.	South Atl.	East South Cent.	West South Cent.	Mount.	Pac.
CHICKEN-FEED—										
Farm Chickens:										
June, 1959	3.0	3.1	3.5	3.1	2.4	3.5	3.4	2.9	3.5	2.3
May, 1959	3.3	3.3	3.8	3.3	2.7	3.5	3.6	3.1	3.5	3.5
June, 1958	4.6	4.7	5.1	4.9	4.4	4.3	4.3	4.1	4.3	4.1
Average (1948-57)	5.7									
Average (June, 1948-57)	5.7									
Broilers:										
June, 1959	3.2	3.3	3.9	3.6	3.4	3.2	3.0	3.1	3.6	3.5
May, 1959	3.3	3.4	4.2	3.6	3.5	3.2	3.1	3.1	3.6	3.5
June, 1958	4.2	4.3	4.8	4.6	4.6	4.0	4.0	4.3	4.2	4.4
TURKEY-FEED—										
June, 1959	6.6	6.5	7.6	6.5	7.4	6.2	7.0	6.0	6.4	5.8
May, 1959	6.5	6.6	7.8	6.5	7.0	6.0	6.9	6.1	6.9	5.9
June, 1958	7.4	7.4	8.1	7.7	9.2	6.6	6.9	6.6	..	6.1
Average (1948-57)	8.6									
Average (June, 1948-57)	8.2									
EGG-FEED—										
June, 1959	7.3	9.2	7.7	6.7	6.7	8.3	8.2	7.1	8.1	6.7
May, 1959	7.3	8.7	7.5	6.9	6.7	7.9	8.2	7.4	8.0	6.7
June, 1958	9.7	10.8	10.4	9.6	9.8	10.0	10.0	10.1	9.7	8.5
Average (1948-57)	11.1									
Average (June, 1948-57)	9.8									

	U.S.	North Atl.	East North Cent.	West North Cent.	South Atl.	South Cent.	West
MILK-FEED—							
June, 1959	1.26	1.17	1.22	1.42	1.52	1.34	1.27
May, 1959	1.27	1.16	1.23	1.41	1.51	1.35	1.29
June, 1958	1.25	1.17	1.21	1.39	1.47	1.33	1.29
Average (1948-57)	1.29						
Average (June, 1948-57)	1.13						
BUTTERFAT-FEED—							
June, 1959	24.7	...	19.9	27.4	...	16.3	18.3
May, 1959	24.5	...	19.9	27.1	...	16.2	18.4
June, 1958	23.5	...	19.7	26.3	...	16.0	19.0
Average (1948-57)	22.0						
Average (June, 1948-57)	21.2						

	U.S.	North Cent.
HOG-CORN—		
June, 1959	12.9	13.1
May, 1959	13.5	13.8
June, 1958	18.2	18.6
Average (1948-57)	13.4	13.7
Average (June, 1948-57)	13.2	13.5

NOTE: Ratios computed at mid-month by U.S. Department of Agriculture. Ratios represent number of pounds of poultry feed equal in value to 1 lb. live farm chicken, turkey or 1 doz. eggs; pounds broiler growing mash equal to 1 lb. broiler; pounds concentrate rations equal to 1 lb. milk or butterfat; bushels of corn equal to 100 lb. hog. Increases in ratios are favorable to the feeder.

KEY TO GEOGRAPHICAL DIVISION

Here is a guide to the states included in the geographical divisions listed in the accompanying commodity-feed price ratios:

New England: Maine, New Hampshire, Vermont, Massachusetts, Rhode Island, Connecticut.

Mid-Atlantic: New York, New Jersey, Pennsylvania.

North Atlantic: New England and Mid-Atlantic states combined.

East North Central: Ohio, Indiana, Illinois, Michigan, Wisconsin.

West North Central: Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas.

North Central: Combination of the two foregoing.

South Atlantic: Delaware, Maryland, Virginia, West Virginia, North Carolina, South Carolina, Georgia, Florida.

East South Central: Kentucky, Tennessee, Alabama, Mississippi.

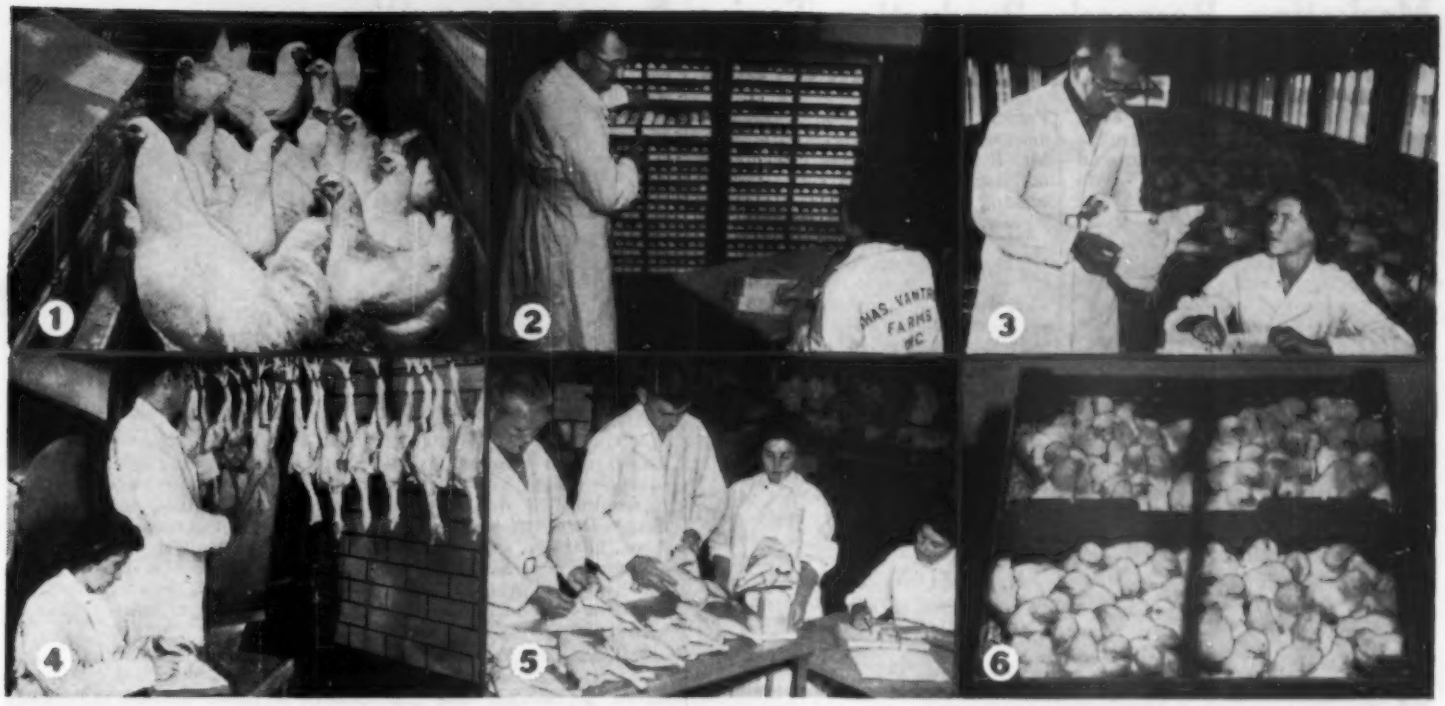
West South Central: Arkansas, Louisiana, Oklahoma, Texas.

South Central: Combination of the two above.

Pacific: Washington, Oregon, California.

Mountain: Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada, Montana.

West: Combination of the two above.



1. One of three hundred and fifty pedigree pens. Our pure line and cross-bred progeny testing program begins here.

2. Traying and recording pedigree eggs. They are separated according to dam number, prior to incubation.

3. At nine weeks of age pedigree birds are individually measured for desired characteristics.

4. At nine weeks, the birds are brought into the processing plant for "on the line" measurements.

5. Skin texture, color, keel length, breast width, leg size, meaty conformation and eviscerated yield are measured and recorded.

6. Your shipment of Vantress Dominant White Male Line Cockerels is your assurance of top production efficiency and consumer quality.

"Vantress Cross" APPLIED GENETICS

PACES INDUSTRY PROGRESS!

The Chas. Vantress Technical Breeding Development Program is one of the oldest and largest meat breeding programs in the industry. It was begun by Chas. Vantress in 1939. This same pure line progeny testing program, together with a pedigree cross-bred progeny testing program is constantly at work on new developments to keep pace with your requirements.

PRODUCTION EFFICIENCY — CONSUMER QUALITY

Chas. Vantress Farms, Inc.

DULUTH, GEORGIA

CHAS. VANTRESS FARMS, INC., DULUTH, GA. — DOMINANT WHITE MALE LINE

Marketing, Research, Production Topics Covered at North Carolina Poultry Days

RALEIGH, N.C. — Poultry Field Days held recently at North Carolina State College were divided into an "Egg Day" and a "Meat Day," with appropriate marketing, research and production discussions on each day.

Norman O. Rebert, Jr., Rose Hill, N.C., and a member of the Rebert Egg Co., Westminster, Md., discussed the importance of top quality "in all 12 eggs per dozen." He pointed out that 11 top eggs out of 12 was not enough, and urged the egg industry to take steps to regain per capita consumption.

Dr. Clayton P. Libeau, poultry marketing specialist at North Carolina State College, reported that a poultryman can make money producing eggs on a contract. However, he advised a producer to refrain from signing a contract that he did not understand. Dr. Libeau predicted that egg prices will rise 20¢ doz. higher by next February, or possibly earlier.

Garland P. King, general manager of the Production Credit Assn. in Duplin County, and Douglas Peacock, vice president, Branch Banking & Trust Co., Wallace, N.C., reported that the poultry loans in the area were in good condition. Mr. King stated that his agency had loaned about $1 million, and Mr. Peacock stated that his bank had loaned about $500,000 in the last several months.

Housing Panel

W. T. Chaffin, assistant county agricultural agent, Burgaw, N.C., moderated a panel on housing. Dr. H. W. Garren, NCSC department of poultry science, discussed the biological reasons for housing. R. M. Ritchie, agricultural engineer at North Carolina, discussed building pointers on conventional house construction, and N. W. Christenbury, Lowder Poultry Farms, Albemarle, N.C., discussed a new windowless house on its farm. Mr. Ritchie emphasized economy in building, but stressed that proper bracing and construction principles were necessary for economizing. Mr. Christenbury reported that by controlling light in new housing that sexual maturity was delayed in pullets somewhat over those housed in conventional buildings. He further stated that their experience was not sufficient as yet to know the outcome during the summer months. A number of questions were asked by the producers about this type of housing.

Kenneth Beam, extension poultry specialist, indicated that started pullets raised to about 16 weeks of age allow further specializing in the poultry industry, allowing the use of capital for an egg producer to increase more rapidly the size of his egg operation. He pointed out, however, that the reputation of the grower is an important aspect in buying started pullets.

Dr. W. L. Blow, using experiment station laying tests and field data, showed that the cost of producing hatching eggs ranges from 48 to 60¢ doz.

Dr. F. W. Glazener, head of the poultry science department, introduced his topic, the department's egg research program, by characterizing the purpose of research.

Dr. F. R. Craig, department of poultry science, discussed a disease prevention program, emphasizing the principles of isolation, sanitation, preventive medication, vaccination, litter, ventilation, watering, feeding, floor space, nesting space and cooling. He pointed out that most of the recommendations were the outgrowth of conferences with feed manufacturers, servicemen and educational groups.

Following the talks, the poultrymen observed experiments underway at the Coastal Plain research station, and viewed the displays of commercial equipment.

Poultry Meat Program

The "Meat Day" program was opened by an outlook discussion on broilers and turkeys by Dr. Libeau. He predicted that broilers will rise to 17-18¢ lb. by August. He reported, however, that only slight rises were in sight for turkeys.

Dr. G. A. Martin discussed various types and systems of brooding, pointing out that the "best type" varies with the individual and his individual circumstances.

W. C. Mills, Jr., poultry extension specialist, moderated a panel consisting of W. J. Jasper, assistant county agricultural agent, Kenansville, N.C.; Charles Edwards, broiler producer, Beulaville, and Durwood Murray, turkey producer, Mt. Olive, N.C.

All of the panel members emphasized the importance of management, particularly the following points: Cleaning and disinfecting house and equipment between broods; proper ventilation; constant watch for details, and comfort of chickens and turkeys; avoiding feed wastage, and supplying plenty fresh, clean water.

All of the speakers on the panel indicated that there were several ways of conducting these management principles; each of the producers discussed his application of these principles in his own enterprise.

Feed Inspection

In the afternoon session, John L. Reitzel, assistant agricultural commissioner, discussed state feed laws. He explained how a sample of feed must be obtained from an official inspector for true sampling of bulk feed.

Dr. George Harner, assistant area supervisor of poultry inspection work, Atlanta, Ga., reported that everybody from farmer to consumer benefits from federal mandatory inspection. The consumer is assured of receiving a bird that is free of disease and processed in a sanitary manner. The producer has an incentive to improve management practices to keep condemned birds at a minimum since rejected birds reduce profits.

The meeting was closed with a discussion on meat research programs by Dr. Glazener, and a detailed listing of health maintenance recommendations presented by Dr. Craig, covering temperature, ventilation, floor space, litter, sanitation, vaccinations, watering, feeding and housing.

Summaries of North Carolina research findings presented at the meetings included the following:

LAYERS AND REPLACEMENT STOCK: Various aspects of feeding and management were covered.

Feeding systems: Layers from both egg producing and broiler strains laid as well on free-choice system of feeding (mash concentrate, corn and oats cafeteria style) as on an all-mash ration. Adequate balancing of the diet appeared more important than the system of feeding. All-mash for layers is increasing in popularity because of simplicity of use and adaptability to automation.

Restricting of feed during pullet growing period delayed sexual maturity about two weeks. Pullets on the restricted program made better use of range than full-fed pullets. Feed savings were around 5% during the growing period in favor of the restricted over the non-restricted group. More skill and labor was required for the restricted program.

A simplified high energy, low pro-

(Turn to POULTRY DAYS on page 16)

MARGARINE TO SWITZERLAND—Margarine was one of the products displayed in the American exhibit at the International Food Exposition in Lausanne, Switzerland, recently. The exhibit was sponsored by the Foreign Agricultural Service, U.S. Department of Agriculture, and the U.S. food industry. Robert Houghtlin (left), president of the National Soybean Processors Assn., is shown supervising unloading operations. The exhibit was part of a continuing program to expand foreign markets for U.S. agricultural products. On display were "quick and easy" foods—frozen, canned, dried and mixed products. Also on display were poultry, rice, wheat, soya products, fruit and honey.

Kill Rats and Mice FAST... with

KILLER KAKES with WARFARIN... (Trademark)

Sensational New Approach to the Rat Problem!

A Good Deal for Good Dealers Everywhere

MEETS WITH TREMENDOUS RESPONSE FROM TRADE EVERYWHERE

DISTRIBUTORS WANTED
Write for Descriptive Brochure, Price List and Samples

Get Ready Now for the New Season— Just Around the Corner

Mfd. by
THE DUN-WIN COMPANY
WILLIAMSPORT, PENNA.

Exclusive Sales Agents:
THE TWIN SUPPLY SERVICE
25 S. GAY STREET BALTIMORE 2, MD.

It's DANNEN for GRAIN and FEED INGREDIENTS

- Bran
- Shorts
- Linseed Meal
- Cottonseed Meal
- Soybean Oil Meal
- Meat Scraps
- Sugar
- Defluorinated Phosphate
- Feed Supplement Urea
- Dried Skim Milk
- Dried Buttermilk

DANNEN

DANNEN MILLS, INC.

Grain and Jobbing Division
St. Joseph, Mo.
Phone: Adams 3-6161

Only BAGPAKS® have a built-in insurance policy backed by International Paper

ACCIDENTS like this *will* happen. That's why International Paper plans for extraordinary stresses and strains when designing its Bagpak multiwall bags.

Only genuine *Gator Hide*® kraft, famous for toughness, is ever used in making Bagpak multiwalls. Quality is controlled every step of the way. International Paper can do this because it grows its own trees, makes its own paper, converts it into printed multiwall bags to your order. It also designs and builds *Bagpaker*® machines that can package up to 60 tons of material per hour!

When you buy Bagpak multiwall bags you get speedy shipments geared to your production schedules. *Twenty-one* sales offices and four strategically-located plants save you money by keeping your inventory at a minimum.

Only Bagpak multiwalls are backed by the full resources of International Paper—world's foremost pulp, paper and paperboard producer.

Next time your Bagpak field service engineer drops by, ask him what's new. He knows.

Bagpak Division **INTERNATIONAL PAPER** New York 17, N.Y.

If the antibiotic you're now

using is on its last legs...

GET YOUR SWINE FEEDS BACK IN ACTION WITH BACIFERM®!

IS YOUR OLDER ANTIBIOTIC READY FOR PASTURE? Chances are it is – what with the reports going around about the older, bacteriostatic (bacteria-slowing) "broad-spectrum" antibiotics.[1,2] Apparently, over the years they've built up resistant strains of bacteria. In other words, the bacteria are back in control, *not* the antibiotic.[3] Are *you* getting full value from the money you now spend on older antibiotics that seem to be diminishing in effectiveness? Do what many feed manufacturers, in the same boat as you, have already done. Change to a modern antibiotic that continues to produce significant responses. Switch to bactericidal (bacteria-killing) Baciferm! You will find –

BACIFERM GETS FEEDS BACK TO MAXIMUM EFFICIENCY FAST! Appetites improve. Pigs pile on weight fast. Mortality goes way down. Baciferm always *stays* on guard because Baciferm contains the exclusive* antibiotic zinc bacitracin. Baciferm's *selective* action kills dangerous bacteria fast but lets beneficial bacteria go right on producing vitamins and other valuable growth factors. With Baciferm, there is no upset of the normal bacterial balance. Fungus infections just don't get started. In stress periods, Baciferm knocks out deadly secondary invaders.

BACIFERM! BEST INSURANCE FOR TOMORROW'S BUSINESS! At high levels or low levels, Baciferm *always gives full protection.* Baciferm packs into feeds plenty of extra B-vitamins, high protein, vitamin K and unidentified growth factors. Zinc bacitracin has the antibiotic stability manufacturers require.

And—Baciferm can be added to each ton of your swine feed at $2 to $4 less than the tetracyclines.

1. McGinnis, J. et al.: Use-history of Antibiotics as Related to Their Efficacy in Promoting Growth of Turkeys. Poultry Science, in press.
2. Slinger, S. J.: Poultry Nutrition in Focus in a Rapidly Advancing Industry. Feed Bag, July, 1958.
3. Whitehair, C. K.: Medicated Swine Feeds. North Am. Vet. (Am. J. of Vet. Sci.) 39 (No. 2) (Feb. 1958): 32.

**Made exclusively by CSC under Patent No. 2,809,892 issued October 15, 1957.*

the buy is BACIFERM®!

(ZINC BACITRACIN ANTIBIOTIC SUPPLEMENT®)

ANIMAL NUTRITION DEPARTMENT • COMMERCIAL SOLVENTS CORPORATION, 260 MADISON AVE., NEW YORK 16
IN MEXICO: COMSOLMEX, S.A., MEXICO 7, D.F. • CANADIAN SALES REPRESENTATIVE: NORMAN STARK

CSC

HEAT DRIED CORN—
Good Cattle Feed

Test shows heat drying doesn't reduce nutrient, digestibility levels of corn.

By D. C. Clanton and M. L. Hemstrom
University of Nebraska

As a result of recent developments in grain drying equipment, high moisture corn is being heat dried to safe storage levels. This practice is becoming so widely accepted that heat dried corn may constitute a large part of the available market supply of corn in the future.

Since corn is a high energy livestock feed, the question of the effect of heat on its nutritive value is important. This was especially apparent following the 1957 harvest. Farmers received price cuts on heat dried corn. Some cattle feeders refused to buy heat dried corn thinking that its nutritive value had been reduced.

The following problems arise in determining the nutritive value of heat dried corn: Differences in drying methods may have varying effects on the nutritive value of corn; high moisture immature corn may react differently when heated than relatively high moisture mature corn, and difference in moisture content at the time of drying may produce varying effects.

The actual value of ingested nutrients (dry matter, protein, energy etc.) depends upon the use which the body is able to make of the nutrients. The consideration is digestibility, since undigested nutrients are not absorbed from the digestive tract. Group feeding trials, in which nutrient effects are measured by feed efficiency records do not reflect good measures of digestibility. This can only be done with digestion trials.

TABLE 1. Temperature and Drying Time Used in Drying Corn

Ration	Initial moisture	Moisture after cooling	Air temperature entering dryer	Drying time
	%	%	Degree F.	Hours
1	20.4	13.0	Unheated*	168.0
2	20.4	13.4	130	7.50
3	20.4	12.2	160	6.75
4	20.4	13.6	190	5.50

*The temperature during the week of natural drying averaged approximately 60° F.

TABLE 2. Average Digestion Coefficients Due to Ration Differences

Ration No.	Growing phase 1	2	3	4	Fattening phase 1	2	3	4
	%	%	%	%	%	%	%	%
Dry matter	65.5	65.5	65.2	65.0	71.7	71.1	70.3	69.8
Organic matter	66.5	66.3	66.3	66.1	72.9	72.2	71.5	70.7
Crude protein	65.1	65.0	65.6	65.0	59.5	57.2	58.1	58.4
Ether extract	53.7	58.5	58.4	55.8	66.5	68.1	73.0	69.1
Crude fiber	39.2	36.6	33.3	33.8	46.7	40.6	40.4	40.7
Nitrogen-free extract	81.3	81.6	81.8	81.3	79.7	79.9	78.1	77.6
Energy	63.2	63.8	62.9	62.6	71.6	71.4	69.1	70.2

Digestibility Trials

Digestion trials were conducted during 1958 at the Nebraska Agricultural Experiment Station to determine the digestibility of beef cattle rations containing artificially dried corn.

Four yearling steers and four rations containing corn, which had been dried artificially under various temperatures, were used in the trials. The trials involved both growing and fattening phases. The digestibility of each ration was measured by each steer in a rotation design. The nutrients consumed and the nutrients excreted were measured. The nutrients remaining in the body were the digested nutrients. The digested nutrients, expressed in per cent of the nutrient intake, are referred to as the digestion coefficient.

Corn used in the experiment contained approximately 25% moisture on the ear when purchased. After shelling and just before artificially drying, the moisture content was 20.4%.

Control corn (Ration 1) was dried to 13% moisture with unheated forced circulating air. The corn dried with heat was dried in a Cambell recirculating dryer. Air flow rates were not measured or varied in this experiment. Corn drying times and temperatures are shown in Table 1.

During the growing phase, ground corn was fed with chopped alfalfa at the rate of 9 lb. of alfalfa and 4 lb. of corn per day. During the fattening phase, corn was increased to 13 lb. per day and alfalfa reduced to 5 lb. per day. The alfalfa hay was coarsely chopped.

EDITOR'S NOTE—D. C. Clanton, assistant professor, department of animal husbandry, and M. L. Hemstrom, extension livestock specialist, University of Nebraska College of Agriculture, report in this article that under the conditions of their experiments it can be concluded that there is no nutrient loss in corn due to artificial heat drying or decreased digestibility of the nutrients in rations containing the corn.

They note, however, that results of the experiments do not reveal information on differences in procedures for drying corn. "It is possible that corn containing different moisture contents should be dried under different conditions," the report says.

The article is reprinted from the Summer, 1959, issue of Nebraska Experiment Station Quarterly.

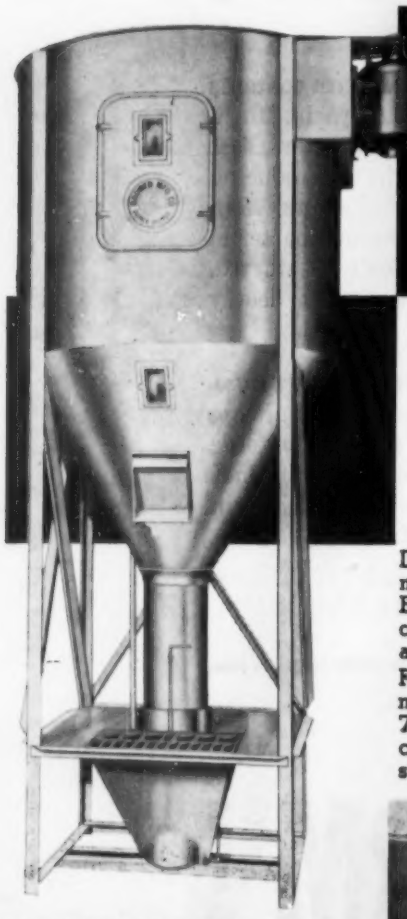
Results Reported

The digestibility coefficients for all nutrients except protein were higher during the fattening phase than during the growing phase (Table 2). This is explainable because the fattening rations contained 72% corn and the growing rations contained 31% corn. The remaining percentages were alfalfa hay. Nutrients in corn are more digestible than nutrients in alfalfa hay.

The possible reason for the decreased digestibility of protein in the fattening ration is that with the increased feed intake an excess of protein was being fed. Digestibility of nutrients will be lower if the nutrients are fed in excess of their need. This indicates that with the possible exception of protein the nutrients in the fattening ration were not being fed in excess of the animal needs while being fattened.

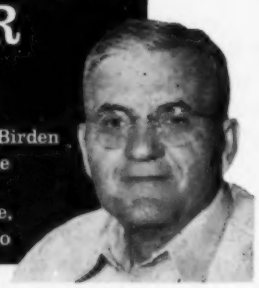
No significant difference was observed in the digestibility of any of the nutrients in the four rations in either the growing phase or the fattening phase of the experiment (Table 2). Animal differences accounted for most of the variation in the digestion coefficients.

Artificial drying of the corn used in the rations had no effect on the chemical composition of the rations. The chemical composition of the corn



"Our BROWER MIXER paid for itself in 6 months..."

Says F. H. Birden
Albuquerque
Feed Store
Albuquerque,
New Mexico

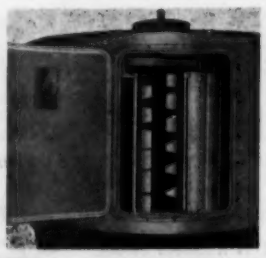


"Our Brower Mixer brought in many new customers and paid for itself in the first six months we used it. We have found the Brower Mixer to be fast, dependable and thorough. We are well pleased with its performance and recommend it to anybody contemplating the purchase of a mixer."

BROWER
Whirlwind MIXER

Dependability, fast mixing action, and low cost operation make Brower the WORLD'S LARGEST SELLING MIXER! Brower action WHIRLS the ingredients instead of just stirring or tumbling them . . . produces the most thorough mix obtainable. Every sack has the same even mixture.

FAST and ECONOMICAL — a perfect blend in about 10 minutes at a power cost of only 3¢ to 5¢ a ton. Five sizes — 700, 1200, 2000, 3000 and 4000 pounds-per-batch mixing capacities. Above-floor and below-floor models. Heavy welded steel construction — built for years of trouble-free service.



Easy to get into through large hinged service door and hinged conveyor sleeve.

Note mixing paddle at top which WHIRLS the ingredients for the most thorough mix.

Glass observation window at eye level provides easy inspection of feed being mixed.

BROWER MFG. CO.
402 N. 3rd, Quincy, Ill.

WRITE for FREE CATALOG

World's Largest Selling Mixer

man conquers mountains

And, some day, man will also conquer cancer. With your help.

Guard your family . . . fight cancer with a checkup and a check

AMERICAN CANCER SOCIETY

What you want in a coccidiostat... Trithiadol's got!

1. Effective Control–

of all commercially important species of coccidia.

2. Superior Feed Conversion–

. . . up to $40 extra profit per 1000 birds in impartial comparative tests.

3. Complete Safety–

for poultry . . . harmless to other warm blooded animals.

3 of the 9 major advantages which only TRITHIADOL® offers. Learn *why* TRITHIADOL gives greater protection, greater profits. Get the FACTS . . . write, wire collect to STERWIN CHEMICALS INC., 1450 Broadway, New York 18, N. Y.

dried with different temperatures was similar.

No special study of palatability was made in this experiment; however, there were no refusals of the rations, indicating they were palatable. The color and appearance of the corn were not altered by drying. Reports of cattle refusing to eat heat dried corn are understandable if the corn was scorched during improper drying.

Under the conditions of this experiment, it can be concluded that there is no nutrient loss in corn due to artificial heat drying, or decreased digestibility of the nutrients in rations containing the corn.

Results of this experiment do not reveal information on differences in procedures for drying corn. It has been reported that there is an association between moisture content, drying temperature and nutrient loss in artificially dried corn. The critical point in this relationship has not been determined. However, it would appear that the lower the moisture content of the corn, the higher the temperature that can be used without altering the nutritive content of the corn.

It is possible that corn containing different moisture contents should be dried under different conditions. The relationship of temperature, drying time, and air flow rate of the heated air would constitute factors involved in the different conditions necessary for drying corn with varying moisture contents. There is need for more research information from which standard procedures could be worked out for drying corn under different conditions.

CARGILL
EXTENDING THE REACH OF THE AMERICAN FARMER

NEW FEED MILL OPENED

LOHRVILLE, IOWA — Lohrville Grain Co. has formally opened its new feed mill. Charles Champlin and Bill Shutt are owners and operators.

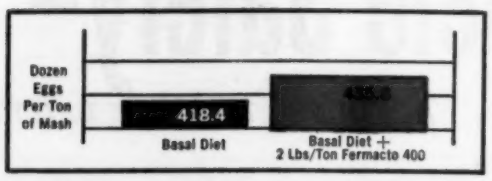
BY THE ONLY STANDARD THAT COUNTS... PROFITABLE EGG PRODUCTION... LAYING MASHES PERFORM BETTER WITH...

Borden's fermacto 400

A unique blend of multiple fermentation factors...only two pounds per ton, on an all-mash basis, provide complete unidentified growth factor fortification... at a cost of only about *twenty-five cents.*

Tests have shown that Fermacto 400, when added to egg mashes already considered complete, can help produce as many as seventeen dozen *extra* eggs per ton of feed. Here is practical proof of performance:

48-week test on Single-comb White Leghorns in laying house



OVER 17 DOZEN EXTRA PER TON OF MASH

Results of a number of practical feeding trials are available for review. Write Borden's, or ask your Borden field representative for these test data... to see just what Fermacto 400 can mean to *your* program.

THE *Borden* COMPANY
FEED SUPPLEMENTS DEPARTMENT
350 Madison Avenue • New York 17, New York

Laboratories and test farms at Elgin, Illinois.

Borden's 300
... for more efficient, more economical egg production... without wasteful over-fortification... and, at a cost of only about $1.10 per ton.

All necessary vitamins and minerals have been blended with Fermacto 400 in one convenient, complete supplement for laying mashes. Write for details.

POULTRY DAYS

(Continued from page 10)

tein diet, using alfalfa as a source of vitamins and proteins, fed during the growing period did not delay sexual maturity as compared with a regular growing all-mash.

No significant differences in rate of lay or hen house mortality were obtained by variations in the pullet growing programs.

Antibiotics and other drugs: No significant response of layers to antibiotics has been noted. The effects of several drugs on summer egg production are under study.

Egg quality: "Sweating" was held at a minimum in egg rooms at 60° F. A technique has been developed for measuring changes in pores of egg shells.

Energy levels: Breeding types and cost of ingredients are determining factors.

Method of housing layers: Floor birds at two locations on comparable feeds have tended to lay as well and in some cases somewhat better than birds in cages.

Cooling layers using fans, foggers and evaporated coolers: Layers in experiments have tended to use whatever cooling device is available to them. Movement of air naturally or by fans appears essential for most successful use of foggers.

BROILERS AND TURKEYS: Reports on broiler and turkey studies included:

Antibiotics and hormones: Limited research suggests that hormones and stress conditions are involved in antibiotic activity.

Dehydrated Serecia Lespedeza and Coastal Bermuda: These were found to be a satisfactory substitute for dehydrated alfalfa in broiler and turkey rations.

Minerals and vitamins: Chickens with copper deficiency have been produced. Present research indicates that adequate vitamin levels are essential during the course of disease.

Stabilized inedible animal and vegetable fats as sources of energy: A practical level of fat in a broiler diet is 3-4%. Vegetable fats are a satisfactory substitute for animal fats at this level. Improved feed efficiency has resulted by this usage.

Milo and pigmentation: Milo requires either mixture with corn or other sources for producing pigmentation in broilers. A satisfactory ratio is three parts of corn to one part of milo.

Physical structure of feed: Pellets gave somewhat better growth in broilers than mash. Differences were small. The additional cost of pelleting tends to about equal any gain of pelleting over the use of mash.

Diet and bactericidal activity of chicken blood plasma: Five different sources of protein at various levels have not increased the antibacterial activity of blood plasma significantly.

Antibiotics and growth: Responses for increased growth were variable, and were dependent on quality of diet and cleanliness of houses. Researchers are looking for an understanding of the action of antibiotics.

Unknown growth factors in natural feedstuffs: Responses to strains of bacteria are used as experimental tools. Chemical structure of unknown factors has not yet been established.

CSU Appointment

FT. COLLINS, COLO.—Lowell H. Watts has been appointed to coordinate all agricultural research, service and instruction at Colorado State University. At 39, he is one of the youngest directors of extension in the U.S.

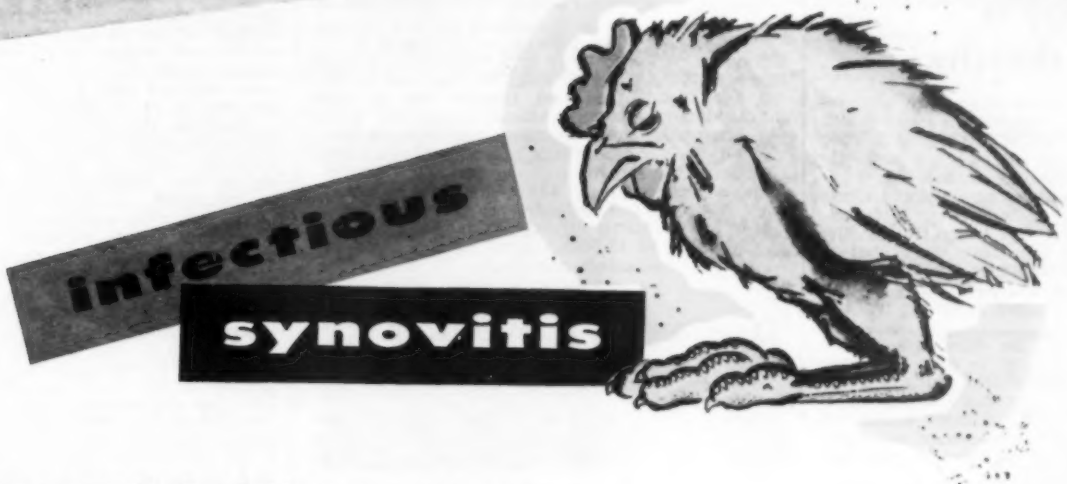
Mr. Watts holds a degree in animal husbandry from the university. He went to CSU in 1954 as director of the information service.

ADVERTISEMENT

Research News AND Review

A roundup of scientific information prepared for the feed industry
Reprinted complete from AGRADATA, Vol. 2, No. 9

Pfizer



As recent as 1954 a new arthritic disease of chickens affecting the joint bursae and tendovaginal sheath was described (1) in Texas. Previous to this time arthritic conditions have been described as caused by various bacteria including **Salmonella pullorum, Staphylococcus aureus, Pasteurella multocida,** PPLO and many other organisms. It has since been resolved that infectious synovitis of chickens is a specific infectious disease caused by a virus or filterable agent.

Shortly after the identification of the disease research work was started at several agricultural experiment stations in the United States and to date considerable data has been established. Presently research is in progress in at least twenty centers in the U. S. Although the disease is considered primarily one of chickens a similar condition has been reported in turkeys (2).

From Texas to Canada . . .

After the Texas report (1) others quickly followed from West Virginia (3) and Delaware (4). One group (5) indicated the disease was present in Pennsylvania, Rhode Island and Maine. In 1957 infectious synovitis was reported (6) from Massachusetts and in New Hampshire (7). A report from Canada (8) indicated the disease was present there.

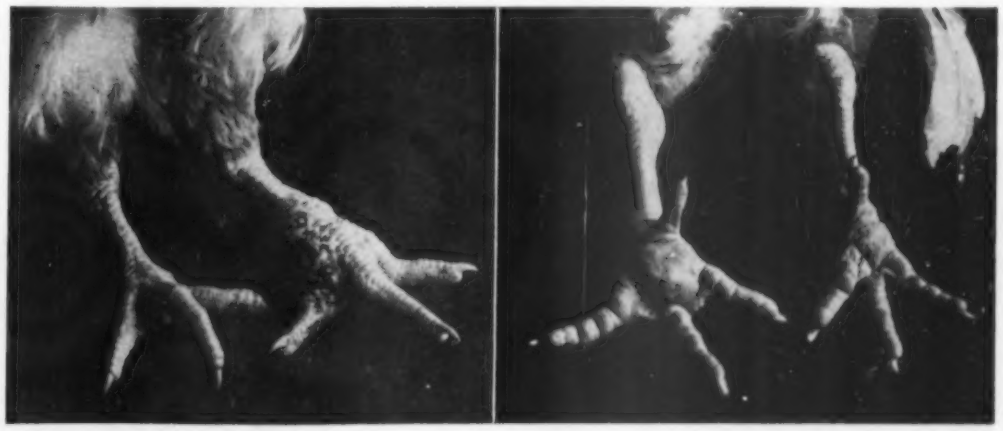
Culls and cripples indicate the economics . . .

The disease has occurred in several broiler-producing areas of the U.S. (9, 10, 11, 12). The economic losses are mainly from morbidity which varies from two to 75 per cent. This results in emaciated birds which dress out poorly (down grading) at the processing plants as well as considerable trimming of carcasses by inspectors. Economic importance of the disease is often measured in number of cull and crippled birds resulting from the disease. A survey in the Delaware-Maryland broiler area of 48 major producers revealed that 24 thought it an increasing problem and 12 considered it a serious economic problem.

Although the morbidity is extremely important in this disease one study (12) showed that in 21 flocks of 154,000 birds the approximate mortality was 7,700. In another investigation (7) of 54,934 day-old chicks examined at two hatcheries, 1,539 chicks showed gross pathology of the disease. In addition 94 out of 3,549 unhatched embryos showed signs of infection.

Young birds are most susceptible . . .

The disease appears mainly in birds four to 12 weeks of age although it has been observed in young pullets 22 weeks of age. One worker has indicated that older birds, especially after 10 to 12 weeks, are resistant as are birds which have once had the disease. Wet and damp litter is believed to increase the problem and one survey showed the disease to be most prevalent from November to March. The latter, however, might be influenced by the fact that respiratory diseases are most prevalent during this period and as a result birds are more carefully checked in the processing plants.



Research indicates a large virus as possible cause . . .

In 1954, an unidentified agent was reported (1, 3, 13) which produced synovitis in chickens affecting primarily the synovial or bursal membranes. At this time research was mostly confined to the lesions, control and infectious ability of the agent and careful studies were not carried out on the nature of the agent itself. However, in 1955, five strains were studied (5), two from Pennsylvania, two from West Virginia and one from Rhode Island and determined it was not bacteria, spirochete or a pleuropneumonia-like (PPLO) organism. The authors determined that it passed through a 5 and 3 sintered glass filter but after such treatment the titer in embryos dropped. The authors found it to be sensitive to tetracycline but less sensitive to chloramphenicol, dihydrostreptomycin and resistant to penicillin. They made electron micrographs and from these concluded that the agent was a rigid, dense, coccobacillus from 0.2 micron to 0.5 micron in size. It was cytopathogenic in tissue cultures to chick heart fibroblasts. They suggested the agent to be most similar to a rickettsia or large virus.

Further studies on the agent in 1956 (11) revealed that of five strains examined all passed through Seitz filter pads of 5.0 microns and 2.0 microns size while it did not pass a 0.1 micron pore size. This was based on embryo mortality of the filtrate. They confirmed the antibiotic sensitivity testing results (5) and the authors further reported that some strains were susceptible to tetracycline, streptomcyin and furazolidone.

The report that a large particle virus was the disease entity was confirmed (12). This was based on the lack of growth in cell-free media and the ability of the agent to pass Seitz filter pads.

A very thorough experiment was performed (14) in which several groups of birds were infected and virus isolation from 29 different body tissues including intestinal contents was attempted. Embryo passage revealed the virus to be present in the duodenum, rectum, liver, gall bladder,

ADVERTISEMENT

kidney, testes, ovary, trachea, lung, air sac, cardiac muscle, pectoral muscle, keel bursa, flexor tendon and sheath, and comb. The virus was not found in the intestinal contents, bile or synovial membrane but was present in practically all other body tissues. A true viremia was produced 48 hours post-inoculation and was still present on the 10th day post-inoculation.

General lameness is an early indication . . .

All of the investigators who have studied the disease report that it occurs in broiler flocks at any time from 4 to 12 weeks of age. However, it has been reported (7) in one-day-old chicks and young adults (20 weeks).

Although the mortality rate is frequently low (about 2 per cent), it may be as high as 30 per cent. The affected birds become weak, listless and tend to assume a sitting position. General lameness is evident in the flock. Combs and wattles become pale and shrunken. A greenish diarrhea is a constant symptom. Although the birds may not eat as much as usual this may be due to their reluctance to go to the feed as a result of joint soreness.

The symptoms of the disease remain for many weeks in experimentally infected birds.

Histopathology is somewhat sketchy . .

Gross pathology was reported by many authors as being a creamy viscous exudate in many joints especially the flexor tendons of the foot pad, wing joints and tendon sheaths, mandibular articulation and keel bursae. A caseous exudate has occasionally been found (12) over the skull and along the neck. Where birds have been severely emaciated and dehydrated there may be no fluid in the joints. In chronic cases the joints may contain cheesy yellow to orange exudate. In acute cases the liver is enlarged and mottled and may contain necrotic foci. An enlarged spleen is not uncommon.

The histopathology of the disease has been somewhat sketchy and lacking. In a recent paper one author (15) made a differential study of infectious hepatitis, infectious synovitis and sulfaquinoxaline poisoning. He stated the most significant lesion in infectious synovitis was a mononuclear proliferation in the liver, usually perivascular, composed of reticulocytes.

The histopathology and hemotology in turkeys (6) has been described in detail. The authors found the thombocyte, heterophil and total leukocyte count and sedimentation rate increased whereas the hematocrit, hemoglobin, and red blood cell count decreased. The brain showed a vascular endothelial and adventitial proliferation. The liver presented a perivascular, periportal and interparenchymal cellular hyperplasia, thought to be due to reticular cells. There was a cardic necrosis and splenic lymphocytic hyperplasia. The sternal bursae showed a heterophilic inflammation.

A comparison (16) was made of the hematology of birds infected with synovitis caused by the virus and that caused by PPLO. The investigators could not differentiate the two diseases on the basis of hemoglobin values and erythrocyte, leucocyte and differential leucocyte counts. In another study (12) it was noted that Giemsa stained smears made from synovial exudate contained large mononuclear cells, lymphocytes, plasma cells and heterophils. In field cases an anemia is present with the hemoglobin being as low as 3.5 gm. per 100 ml. of blood. The erythrocytes may be achromic and showing some polychromatophilia, anisocytosis and poikilocytosis. The blood changes have varied directly with the severity of infection.

The electrophoretic pattern of serum proteins was studied (17). It was found that the serum albumin fraction was reduced by 50 per cent before signs were apparent. The alpha and beta globulins remained constant but the gamma globulin fraction increased proportionally.

Case history of flock is beginning to diagnose...

A diagnosis of infectious synovitis is made from a case history of a flock showing general lameness in up to 30 per cent of the birds and low mortality. Further examination would reveal swollen joints and tendon sheaths. The birds would be listless, emaciated and dehydrated. An enlargement of the keel bursae would be observed and blue-green droppings would be present.

At necropsy an exudate would be present in the flexor tendons of the feet and foot pads, wing joints, mandibular articulation and keel bursae. A swollen liver and enlarged spleen are not unusual.

A differential diagnosis of fowl typhoid and other septicemic conditions should be made bacteriologically. Arthritis caused by staphylococci or other bacteria can be confirmed by this means.

The diagnosis can further be confirmed by injecting suspected exudate or a suspension of liver into the yolk sac of seven-day-old embryos or into the hock joint, food pad, muscle vein or subcutaneous area of four-week-old susceptible chicks (4). The embryos would show an enlarged liver, splenomegaly subcutaneous hemorrhages and congestion of the kidneys.

Some investigators (7) found that although serial embryo passage tended to reduce the pathogenicity of the virus for chicken plaque formation usually resulted 48-96 hours following inoculation on the chorioallantoic membrane.

Treatment, prevention and control . . .

Because more than half of the scientific literature has to do with drug treatments for the disease, this phase will be dealt with in order of paper sequence.

In 1955 one group (18) reported the effect of continuous feeding of antibiotics and the influence of stilbestrol and coccidiostats in synovitis control. Chlortetracycline and oxytetracycline were found effective in preventing the symptoms of the disease whereas erythromycin was without beneficial effects. Synovitis control was studied (19) by comparing different feeding levels of antibiotics. Streptomycin and penicillin administered in the feed apparently did not control the infection or improve the growth rate whereas the feeding of chlortetracycline and oxytetracycline prevented the general spread of infection. Another (20) reported on the efficacy of chlortetracycline feeding in relation to the time of inoculation and found it to be quite effective. In August of 1955 (21) results of studies on infectious synovitis therapy were reported. It was found furazolidone (200 gm. per ton), chlortetracycline and oxytetracycline either by administration in the feed at 500 gm. per ton or by injection at the rate of 50 mg. per bird ineffective in controlling the disease. In view of present day information it appears that this was a different strain of virus than is presently encountered.

Some (22) discussed antibiotic and furazolidone feeding at 100 and 200 gm. per ton for synovitis control in September, 1956. They reported that chlortetracycline, oxytetracycline, tetracycline, furazolidone, chloramphenicol, and an experimental nitrofuran given continuously were effective in that order, with the latter two drugs appearing to be of no practical value. The condition of the birds tended to improve gradually as the level of oxytetracycline, tetracycline and furazolidone increased above the 100 gm. per ton level. Others (23) studied the efficacy of intramuscular streptomycin and compared continuous and intermittent feeding of chlortetracycline and furazolidone. Injectable streptomycin was partially effective if given at time of infection only. Continuous feeding of chlortetracycline or furazolidone was superior to intermittent treatment.

Some investigators (24) studied the use of oxytetracycline in the prophylaxis of synovitis of experimentally infected chickens. Four-week-old chicks were infected with the agent and treated simultaneously in the mash with 100 ppm and 200 ppm, respectively, with several antibiotics. Over the seven-week observation period birds medicated with either level of oxytetracycline in the feed for two or three weeks showed a growth rate equal to that of non-infected controls, whereas groups medicated with streptomycin or penicillin and the infected untreated controls showed severe growth depression and high mortalities. Researchers (25) studied further the continuous feeding of oxytetracycline and stated that birds maintained weight even when symptoms were present when treatment began. Equivalent results were obtained with a single injection of 50 mg. of the drug in an oil suspension.

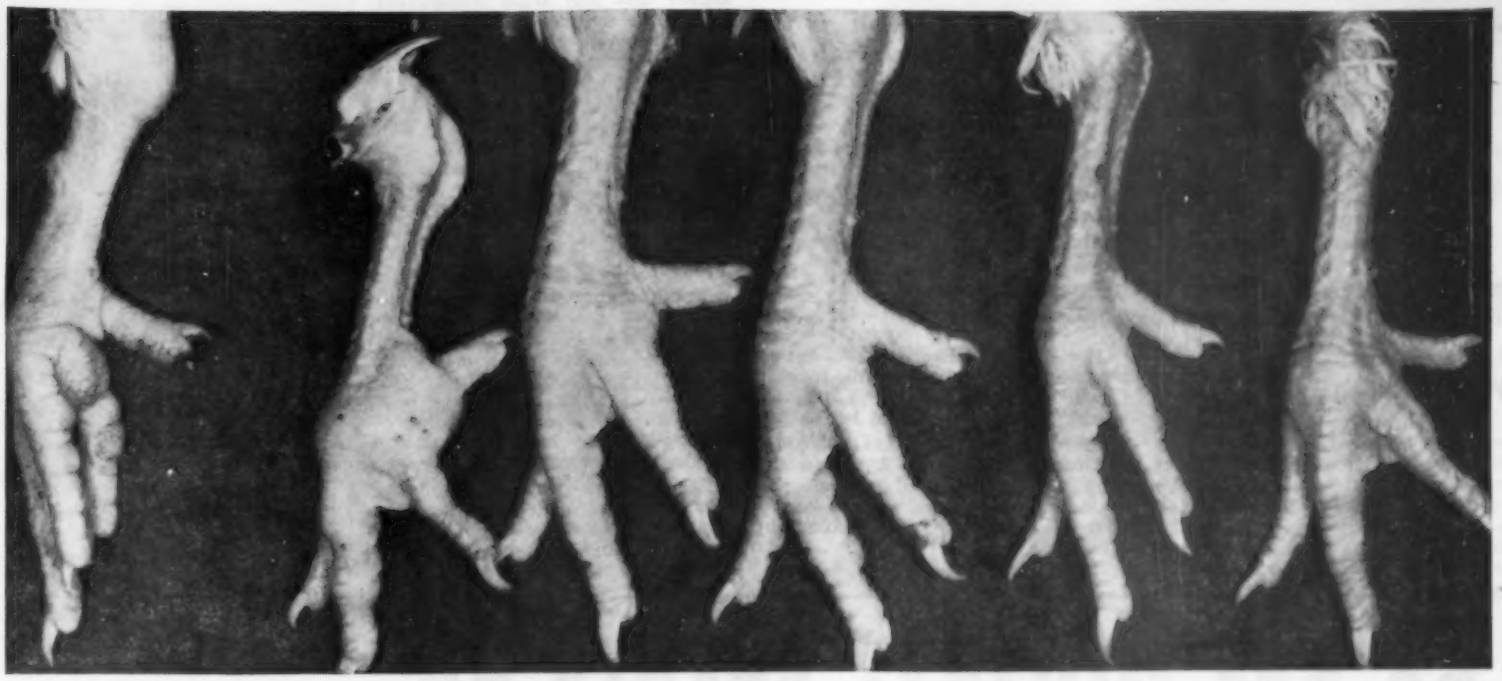
Reports (26, 27) in January, 1957, showed chlortetracycline at 200 gm. per ton to be the optimum level for control of synovitis. Similar results were obtained with oxytetracycline. Again erythromycin, streptomycin and penicillin were ineffective when administered in the feed. Diethylstilbestrol, sulfaquinoxaline, nitrophenide, sulfamethazine or combinations of these drugs had no detrimental or therapeutic influence on the course of the disease.

Laboratory experiments were described (28) where a significant suppression of the disease was obtained by feeding prophylactically 50 to 100 gm. per ton of furazolidone in the mash. In some experiments the drug was fed seven days before infection and in others six days after inoculation. The therapeutic effect was directly proportional to dosage used. In synovitis field trials involving 11 flocks of chickens totaling 168,100, and one flock of 3,500 turkeys, 100 and 200 gm. per ton of furazolidone did not permit any new cases to develop and brought about a marked improvement in many infected birds. The turkeys also received a soluble oxytetracycline product for one week at the rate of one ounce per five gallons.

It was shown (29, 30, 31) that chlortetracycline was effective in the control of infectious synovitis continuous feeding from one day of age with chlortetracycline at 100 gm. per ton was found to give effective control. Some studied (32) the disease produced by two atypical strains of infectious synovitis as well as arthritis caused by PPLO and found that neither chlortetracycline nor furazolidone were effective against the infectious synovitis viruses and the former was only partially effective against the PPLO-induced arthritis. Further drug studies have been made (26, 33, 34, 35) but these generally support the preceding data.

Some workers (36) experimentally infected

Introduction of synovitis agent directly into foot pad to artificially induce infectious synovitis



RESPONSE OF SYNOVITIS foot pad lesions to various Terramycin treatments. From left to right: negative control, positive control; 12.5 mg. and 6.25 mg. of Terramycin given at time of infection; and 12.5 mg. and 6.25 mg. of Terramycin given three days after infection. Note—both levels of Terramycin gave complete control when given at time of infection; while only 12.5 mg. of Terramycin controlled the infection when administered three days post-infection. Photo by H. L. Chute and D. C. O'Meara, University of Maine.

four-week-old White Rock chicks with very pathogenic strain of infectious synovitis virus and found that as little as 12.5 mg. per bird of oxytetracycline in oil or in propylene glycol at the time of infection completely suppressed the disease. The photograph shows the infected control and the treated birds.

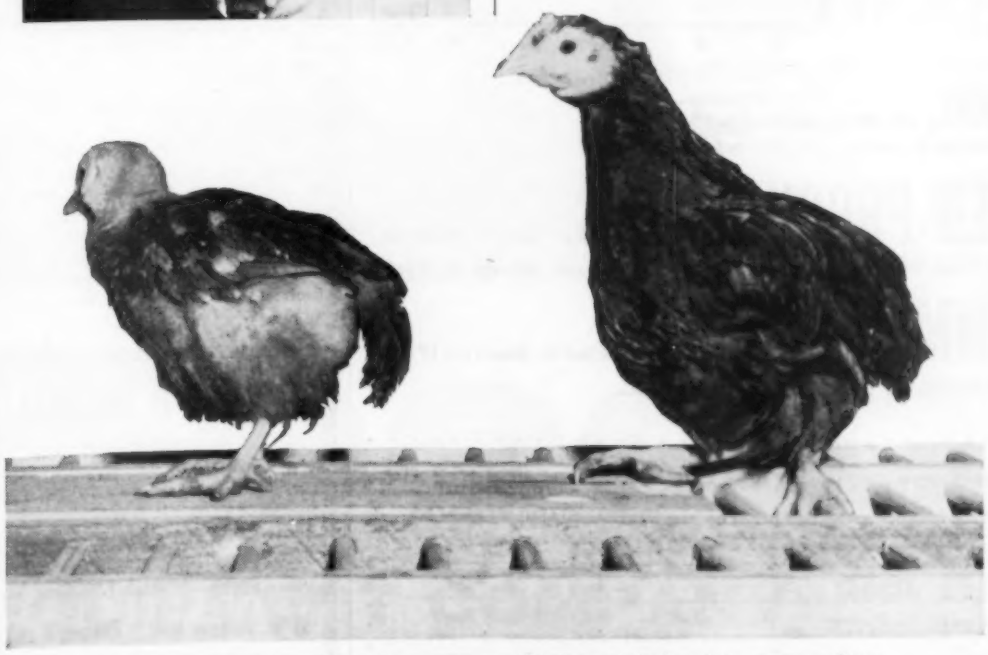
In summary . . .

A disease of chickens and turkeys characterized by swelling of the joints with exudate in the tendon sheaths has been described as common in the United States.

Birds of all ages may be affected. There is evidence that the agent can be transmitted through the embryo. The etiological agent is described as a large particle virus.

Several antibiotics have been found effective in controlling the disease.

The enlarged foot pad clearly represents synovitis.



Infectious synovitis reflects the symptoms of being off feed and in poor condition.

For additional copies of this article, write to Chas. Pfizer & Co., Inc., AGRAData, Agricultural Research & Development Department, Terre Haute, Ind.

Work of these men are cited . . .

1. F. K. Wills, Texas Agricultural Experiment Station Progress Report 1723, 1954.
2. C. H. Snoeyenbos and Olga M. Olesuik, Proceedings of the 27th Annual Northeastern Pullorum Conference, University of New Hampshire, June, 1955.
3. N. O. Olson, J. K. Bietner, D. C. Shelton, A. A. Munro and G. C. Anderson, Abstracts of Annual Poultry Science Meeting, 33:1075, 39-40, 1954.
4. M. S. Cover and J. N. Galeta, Proceedings 27th Annual Northeastern Pullorum Conference, University of New Hampshire, June, 1955.
5. J. C. Leece, F. G. Sperling, L. Hayflick and W. Steinebring, Journal of Experimental Medicine, 102:489-498, 1955.
6. M. Sevoian, C. H. Snoeyenbos, H. Basch and I. Reynolds, Avian Diseases, 1:121-122, 1957.
7. S. C. Thayer, R. C. Strout and W. R. Dunlop, Poultry Science, 37:449-454, 1958.
8. C. H. Bigland and Jack A. Brown, Canadian Journal of Comparative Medicine, 19:251-254, 1955.
9. U. S. Department of Agriculture Conference on Infectious Synovitis in Poultry, Washington, D. C., May, 1956.
10. F. K. Wills, Southwestern Veterinarian, 8:146-153, 1955.
11. M. S. Cover, J. N. Caleta, E. F. Waller, American Journal of Veterinary Research, 17:12-15, 1956.
12. N. O. Olson, D. C. Shelton, J. K. Bietner, D. A. Munro and G. C. Anderson, American Journal of Veterinary Research, 17:747-754, 1956.
13. F. K. Wills, Texas Agricultural Experiment Station Progress Report 1674, April, 1954.
14. M. S. Cover and W. J. Benton, Avian Diseases, 1:312-319, 1957.
15. M. Sevoian, 95th Annual Meeting of American Veterinary Medical Association, Philadelphia, Pa., 1958.
16. N. O. Olson, D. C. Shelton, D. A. Munro and Ruth Bietner, Avian Diseases, 1:82-91, 1957.
17. D. C. Shelton, N. O. Olson and T. Cooperman, Abstracts of 47th Annual Meeting of Poultry Science, p. 62, 1958.
18. D. C. Shelton, F. K. Bietner, N. O. Olson, G. C. Anderson and C. E. Weakley, Jr., Abstracts of Annual Poultry Science Meeting, 34:1221, 1955.
19. N. O. Olson, D. C. Shelton, J. K. Bietner and C. E. Weakley, Jr., Abstract of Annual Poultry Science Meeting, 34: 1214, 1955.
20. J. K. Bietner, D. C. Shelton, N. O. Olson and C. E. Weakley, Jr., Poultry Science Annual Meeting, p. 1181, 1955.
21. F. K. Wills and J. P. Delaplane, Proceedings Book of 92nd American Veterinary Medical Association Meeting, 350-356, 1955.
22. D. C. Shelton, N. O. Olson and C. E. Weakley, Jr., 45th Annual Poultry Science Meeting, p. 1171, 1956.
23. D. A. Munro, H. O. Olson, D. C. Shelton and C. E. Weakley, Jr., Annual Meeting of Poultry Science, 35:1161, 1956.
24. E. H. Peterson, R. Chalquest and H. G. Luther, Antibiotics Annual, New York Medical Encyclopaedia, Inc., 313-318, 1955-56.
25. E. H. Peterson, E. A. White and H. G. Luther, Antibiotics Annual, New York Medical Encyclopaedia, Inc., 581-583, 1956-57.
26. N. O. Olson, D. C. Shelton, J. K. Bietner and C. E. Weakley, Jr., American Journal of Veterinary Research, 18:200-203, 1957.
27. D. C. Shelton, J. K. Bietner, N. O. Olson, G. C. Anderson and C. E. Weakley, Jr., Poultry Science, 36:113-121, 1957.
28. A. S. Cosgrove, Journal of the American Veterinary Medical Association, 130:286-289, 1957.
29. R. White-Stevens, K. G. Seeger, H. C. Zalbel and M. S. Cover, Abstracts of the 46th Annual Meeting of Poultry Science, 1957.
30. N. O. Olson and D. C. Shelton, Abstracts 46th Annual Meeting of Poultry Science, 1957.
31. N. O. Olson and D. C. Shelton, Annual Meeting of the American Veterinary Medical Association, Cleveland, Ohio, August, 1957.
32. N. O. Olson, D. C. Shelton and D. A. Munro, American Journal Veterinary Research, 18:735-739, 1957.
33. D. C. Shelton and N. O. Olson, 5th Annual Symposium of Antibiotics, Washington, D. C., 1957.
34. N. O. Olson and D. C. Shelton, Journal of American Veterinary Medical Association, 132:477-482, 1958.
35. N. O. Olson and D. C. Shelton, Abstract of the Annual Meeting of Poultry Science, p. 51, 1958.
36. H. L. Chute, D. C. O'Meara and D. D. Payne, unpublished data, Department of Animal Pathology, University of Maine, Orono, December, 1957.

FEED CONTROL COMMENT

By BRUCE POUNDSTONE
Secretary, Association of American Feed Control Officials
Kentucky Agricultural Experiment Station, Lexington

Lecithin and Feed Labeling

A registration was recently received showing "lecithinated soy flour" as an ingredient. The product was soy flour to which lecithin had been added. This raises the basic question of how to declare the addition of one or more products to another.

The answer is clear-cut. The correct way to do this is list the items together as "soy flour with added lecithin" or "soy flour and lecithin."

Control officials as well as the Food & Drug Administration frown on a term such as lecithinated, mineralized or vitaminized. Labeling in accord with the suggestion given above is acceptable.

Exceptions to this would include iodized salt and trace mineralized salt, terms that are in use and are of a specialized character. Otherwise the rule cited above should be followed.

A very good reason for this rule is illustrated in another proposal, the term "lecithin citrate." Such a name implies a chemical compound. Since this is a simple mixture of lecithin and citric acid then it should be so declared as "lecithin and citric acid."

Lecithin has been used and is used for various purposes. As a stimulant it is injected into animals. It is listed in the Association of American Feed Control Officials annual publication as a chemical preservative. It will increase the stability of vitamins, principally vitamin A. It is also used as an ingredient to replace or perhaps add more lecithin than was removed by manufacturing process.

Lecithin is present in many products. Soybeans are one of the main sources. If cottonseed and other sources become common then it will be desirable to declare the source as well as the ingredient such as soybean lecithin or cottonseed lecithin.

Some years ago a manufacturer proposed "lecithinated solvent extracted soybean oil flakes." He was advised to use the term "solvent extracted soybean oil flakes and lecithin." A "lecithinated cottonseed meal" has likewise been proposed. The advice again is "cottonseed meal and lecithin."

Other expressions of interest here are "free lecithin" and "unbound lecithin." These have been discouraged as having indefinite meaning.

CONTEST WINNERS—Winners of a dealer sales contest sponsored by Vy Lactos Laboratories, Inc., Des Moines, are Mr. and Mrs. Chester J. Maczulski, Bay City, Mich. They are shown as they left for their expense paid weekend vacation to New York City.

NRC Nutrient Allowances

A recent request reads, "Where may we obtain a copy of the National Research Council recommended nutrient allowances for formulation of feeds for livestock and poultry?"

These reports are published by the National Research Council, National Academy of Sciences, 2101 Constitution Ave., N.W., Washington 25, D.C. Reports have been prepared covering the nutrient requirements for poultry, swine, dairy cattle, beef cattle, sheep, horses, foxes, mink and dogs. These publications are available at 50¢ each. Orders should be directed to the council and accompanied by the proper remittance.

Reprinting Feed Control Reports

Requests are sometimes made for permission to reprint a section of a feed control publication listing samples for a particular company or a product for promotional purposes. I know of no state that permits this. This information is already available in published form in most instances. Anyone can have it for the asking. As published there is no partiality between companies and the reader can quickly make any comparisons he wishes.

Separating out such reports for particular products or for a particular company could only lead to bias which is not present in the original reports.

BO-DEE MINERAL STABLE D2

WISCONSIN ALUMNI RESEARCH FOUNDATION
Approved for VITAMIN D upon periodic tests

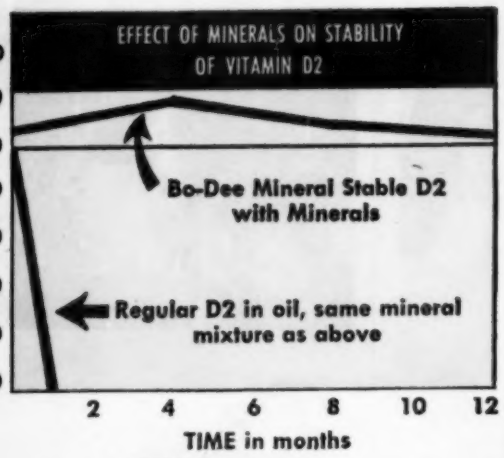
Now APPROVED

For 12 months stability in the presence of these listed minerals by

WISCONSIN ALUMNI RESEARCH FOUNDATION

Note: MINERAL STABLE D2 fully present at the end of 12 months.
Ordinary D2 practically gone in 30 days.

Ground Limestone	41.23%	Ferrous sulfate	0.50%
Steamed bonemeal	15.00	Copper sulfate	0.15
Tricalcium phosphate	13.00	Manganese sulfate	0.10
Magnesium sulfate	10.00	Cobalt sulfate	0.02
Iodized sodium chloride			20.00%



This is a product of N. V. PHILIPS-ROXANE, The Netherlands
The world's largest manufacturer of Vitamin D

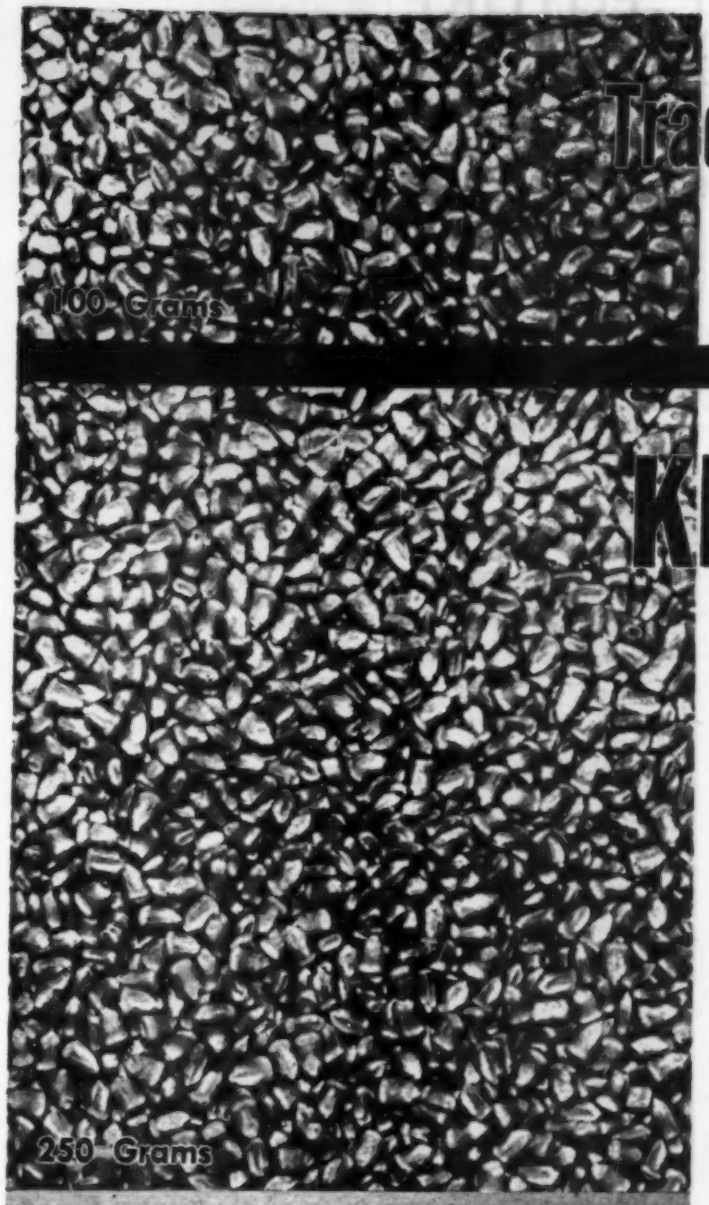
Sold exclusively by BOWMAN FEED PRODUCTS, INC. Holland, Michigan
13160 Ortley Place, Van Nuys, California • 600 South Michigan, Chicago 5, Illinois

CHARLES BOWMAN & CO., 220 East 42nd St., New York 17, N.Y.
Distributors for NORTH AMERICAN PHILIPS COMPANY, INC.

Send for new low prices and technical bulletin

BOWMAN FEED PRODUCTS, INC., Holland, Michigan
Please send me full information and prices on new MINERAL STABLE VITAMIN D2.
NAME_____
COMPANY_____
ADDRESS_____

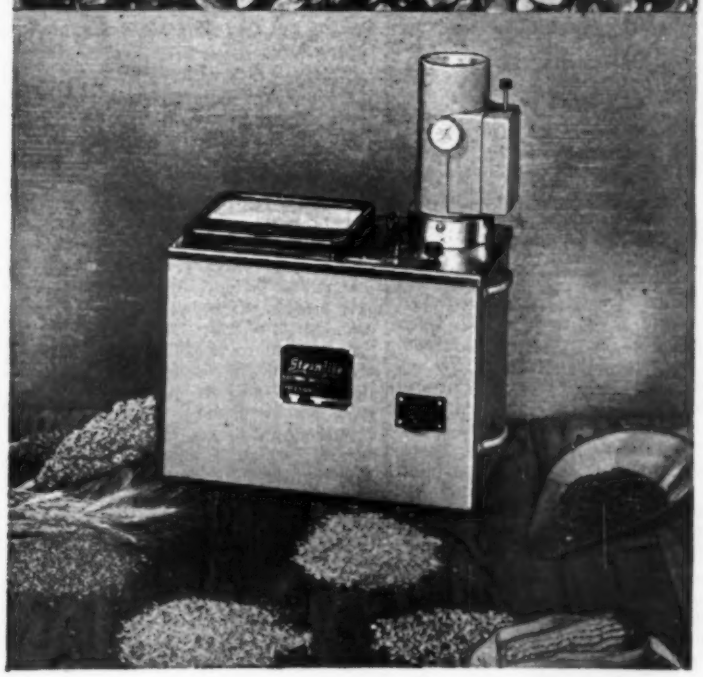
CHARLES H. HUBBELL
CONSULTANT
Feed Formulation and Research
Phone—Wabash 2-9005
53 W. Jackson Blvd. Chicago 4, Ill.



Trade small samples like this for this more accurate KING-SIZE SAMPLE

trade up to reliable moisture testing . . . trade for the

Steinlite · 500-RC



For years the standard of the grain trade, Steinlite moisture testers are more widely used than all other makes of testers combined. It didn't just happen that way . . . years of research and improvement have been invested in every Steinlite model.

And now the new 500-RC with the new king-size sample tops them all! Here's how the Steinlite 500-RC gives you more of everything you need for better moisture testing:

NEW KING-SIZE SAMPLE—Now you get a better, more representative test of the entire load with the big new 250-gram sample. Nothing to grind . . . retest the sample easily or return it to the load totally undamaged.

INSTANT ACCURACY—Make perfect tests of grain right from the drier or samples of mixed moisture content in seconds . . . no need to wait hours for moisture equalization.

FAST, EASY OPERATION—No chance for human error, you just drop the sample in the test cell, and check the automatic meter reading . . . no buttons to push, no dials to adjust. One scale for all moisture ranges.

IMPROVED FEATURES—New, large 9-inch meter . . . easy-to-read, built-in, eye-level thermometer . . . new round funnel with automatic reset . . . redesigned circuit with overlap elimination.

GUARANTEED PERFORMANCE—Your new Steinlite 500-RC is furnished with a full year's factory guarantee and free loaner service is provided for the life of the Steinlite. You're assured of having topnotch moisture testing facilities at all times.

Protect your grain profits with the most accurate moisture testing possible. See your Seedburo representative or write us for complete information on the Steinlite 500-RC and the generous trade-in allowances being offered for your present equipment.

Seedburo

(SEED TRADE REPORTING BUREAU)

EQUIPMENT COMPANY

Dept. FS-7, 618 W. Jackson Blvd., Chicago 6, Ill.

POULTRY FEEDING OF THE FUTURE

Management
Disease Control
Feeding Methods
Formulation
Tomorrow's Business
Future Research

By Dr. J. M. Snyder
The Beacon Milling Co.

POULTRY MANAGEMENT OF THE FUTURE: One thing seems evident about the poultry **unit** of the future: **Bigness.** This is not to say that the poultry building itself will be extremely large. But there will be a large number of units located in close proximity to one another—and all under one command. This large nest of poultry production units may be controlled by the feed manufacturer, the processor, the hatcheryman or a private enterpriser. But no matter who does the "controlling" of the nest, it seems certain that the poultry production phase will be closely coordinated with all segments—all the way from the breeding operation right through to the housewife.

Despite the hierarchy of control, **specialization** will be the order of the day. One segment will be responsible for a pullet-growing program. Another segment will be responsible for the production of hatching eggs. And so forth. The "dual" purpose bird will obviously be an animal of the past. We will have either the high-speed production layer or the broiler breeder. No in-betweens.

More and more attention will be given to the **environment** of the bird. Appropriate housing will be selected so as to maximize dollar returns. In general the poultryman of the future will keep heat on his birds longer than he does at present. A longer period of supplementary heat for broilers will save a sufficient amount of feed to more than offset the heating costs. Houses will be more fully insulated than has been the case in the past. This will lower your cost of production in both the winter and the summer.

Poultry **housing** in the future will be more highly **automatic.** We have already seen this future trend develop on the Jesse Jewell broiler experimental farm at Gainesville, Ga. All windows on the experimental house may be opened with the turn of a crank. The turn of another crank lifts the feeders out of the way so that the floor can be readily cleaned. Still other innovations make this new house a real labor saver.

Automatic feeders got off to a bad start in the broiler business. They will be coming back in the future. Automatic feeders save on labor. In industry of the future, whether with poultry or otherwise, returns will be maximized with the adoption of labor-saving mechanical devices.

Don't lose hope about **CRD.** While CRD might not be completely licked, it will be greatly checked. I have word from a large broiler chick producer, in the eastern U.S., that real progress is being made in the production of CRD "negative" chicks. Not only do the CRD-negative chicks grow and convert better, but also the dams perform much better. An improvement up to 8% in hatchability has been reported.

Unfortunately, at the present time it appears that these CRD-negative breeders can be kept clean only if they are isolated in flocks of 500-1,000 birds. Whether or not the CRD-negative chicks will ever become available on a widespread basis, is a moot question. But indications are that there is certainly hope for the future.

And we are confident that the poultry pathologist will continue to give us better and better tools for the **identification of poultry diseases.** At the present time, the "secondary" disease invaders are a major headache. We don't know where or when to use which antibiotic, or other medicinals—nor even if any medicinal is specific for the rascally organism causing the trouble. Much is now being done to develop a technique which can be used to identify accurately and quickly the bad bugs. And furthermore, the pathologist is well on his way to saying that for such-and-such a bug you should use thus-and-so medicinal.

The use of **vaccines for coccidiosis** will gain in popularity and acceptance. Coccidiosis vaccines presently being used are far from foolproof. Many who have used them are enthusiastic—a few, not so. But the principle is good. It will find favor in the future.

Likewise, effective **vaccines for leukosis,** loom on the horizon. And there is hope, too, that cholera bacterins will prove to be the salvation of certain turkey-growing areas — which will otherwise rapidly become obsolete. Our experience thus far with turkey cholera bacterins gives us hope for the future.

I am **not** too enthusiastic about the future of **restricted feeding.** Restricted feeding takes us back to Grandmother's time. Remember how she used to go out into the chicken yard, throw a limited amount of grain from her apron and cry "chick, chick, chick." This sort of thing is too laborious for our highly competitive industry of today. We can't be going out to feed the chickens a couple of times a day with a given amount of feed—whether from an apron or from a 24 karat scale. There's too much work involved.

Rather than to restricted feeding, we look to a feed with sufficient fiber to keep the birds from eating too much. It is undeniably true that birds will compensate for their low-calorie diet by eating a little more. Yes, we find that if we reduce the caloric content by about 10%, the chickens eat 5% more. The point is, they do not take in as many total calories as they did with a dense diet—and as a result there are fewer problems both with fattiness and cannibalism.

I predict that we will be going to a **third feed for broilers.** I don't mean a "pre-starter." The third feed will be both a starter and a finisher. Insofar as nutrient make-up is concerned, this feed will be half way between the regular starter and finisher. This new feed will be used so that it will not be necessary to take the regular broiler-finisher feed out of the bulk bin before starting a new batch of broiler chicks. Thus, if some of the new "starter-finisher" is left in the bin at the end of the flock, it will also be used to start the next flock of birds. It will be in crumble form.

I predict a good future for **crumbles.** And the reason, again, is a matter of expediency. Crumbles are much more pleasant to feed than is mash. Crumbles flow easily—and with bulk that's mighty important. We will continue to use pellets on broilers. But for most all other classes of poultry, we will use crumbles.

More and more **complete feeds** will be used in the future. Mash and scratch, like Grandmother's apron, will pass out of the picture. And while there is obviously a nutritional reason for this change—again, the reason is primarily one of expediency. There is a lot less labor involved in feeding an all-mash program than in feeding a scratch and mash program.

THE FEED BAG OF THE FUTURE: Looking carefully in the distance, we can see **different feeds for the males and females.** The female chick will start off on a feed which has the approximate calorie:protein ratio of our present broiler-finisher feed. The male will start off on the starter, pretty much as it is now. And he will continue on with a finisher pretty much as it is now. But the female will be fed a finisher which has a calorie:protein ratio about 8 points wider than the present broiler-finisher. The same sort of principle applies with growing turkeys. As a matter of fact, you're behind times if you don't know that they already have different feeds at different times for tom turkeys than for female turkeys on the West Coast of the U.S.

Don't overlook the fact, too, that there will be **specific diets for specific strains of layers.** At Beacon, we already have them. We have a low calorie feed for heavy broiler breeders, a high calorie feed for production layers, and an in-between calorie feed for the in-between layers.

And don't forget, too, that a hen turkey, which is to be saved as a breeder, doesn't need the same sort of ration as a growing turkey—nor does she need the same one as a breeding turkey. She needs a special feed which, if properly formulated, will let her keep her "sweet sixteen" appearance, and at the same time save you money on the feed bill.

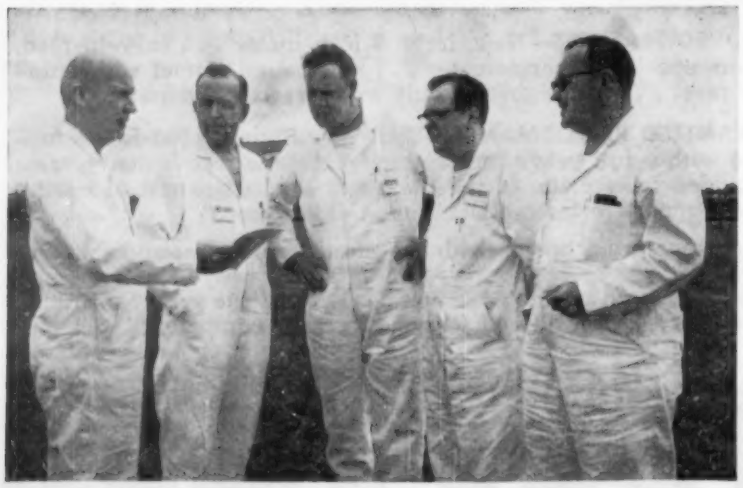
And I need not remind you that the nutrient requirements of the molting hen are not the same as the nutrient requirements of the laying hen. But then in our industry of tomorrow, we will not keep the layer much beyond 12 months of production anyway—because we can't afford the poor-quality egg she lays when she starts to age.

While on the subject of feed changes, it should be pointed out that the nutritionist is going to have to give more and more attention to changing his **formulas** depending upon the **season** of the year. Just as the seasons have an effect on nutrient needs, so, too, does the climate.

Look to more and more **hormones** in the feed bag of the future. A number of relationships are known to ex-

Dr. J. M. Snyder

AUTHOR—Dr. John M. Snyder is director of poultry research for The Beacon Milling Co., a division of Spencer Kellogg & Sons, Inc., Cayuga, N.Y. He joined Beacon in 1954 after receiving his Ph.D. degree at the University of Illinois. Dr. Snyder is the co-author of scientific papers concerning surface active agents in chick nutrition, unidentified growth factors and the hemorrhagic syndome in the chick. The topic of his Ph.D. thesis was the chick's requirement for unidentified factors with special reference to assay techniques. He also is the author of numerous articles on poultry management. Dr. Snyder first served Beacon as a poultry specialist, concentrating on extension and education and also helping to direct poultry research.. On Jan. 1, 1959, he was appointed director of poultry research, directing research, formulation and extension activities. He also is a member of the Beacon board of directors. Before returning to the University of Illinois to do graduate work, Dr. Snyder taught vocational agriculture in Illinois. The accompanying article is from a talk by Dr. Snyder at the 1959 convention of the Canadian Feed Manufacturers Assn.



PFIZER SALES CONVENTION—Hugh O. Dermody (left), assistant general manager, agricultural sales division, Chas. Pfizer & Co., Inc., has the attention of his department heads at this executive session. He is explaining some of the details of the division's recent annual sales convention to (from his left): A. E. Wilson, feed supplements sales manager; Patrick Connolly, animal health products sales manager; Robert Robinson, sales promotion manager, and Fred Manley, advertising manager. The officials were among some 90 sales executives and representatives at the meeting at the Pfizer agricultural research and development center at Terre Haute, Ind. They were shown and practiced animal and poultry health and nutrition techniques under supervision of the center's scientists. Mr. Dermody and the department heads were on the "faculty," too.

ist between nutrients and hormones. Consider for example recent Colorado work which suggests a relationship between thyroid activity and vitamin C. Poultry endocrinology offers an extremely promising field for the poultry biologist—and one of these days this poultry biologist will come up with facts and figures about how the feed manufacturer can improve his feeds further by adding the proper hormones. The time may well come when somatotrophin, thyrotrophin, gonadotrophin, LH, FSH, androgen, estrogen, thyroxin and progesterone are as familiar to the nutritionist as is vitamin B_{12}, vitamin D, pantothenic acid, and niacin.

Don't be sure that the use of **enzymes** will be limited to ruminant feeds alone. There is already evidence that enzymes enhance the digestibility of high-fiber poultry feeds.

Also, we will be hearing more and more about **tranquilizers** for poultry. At present, it would appear that under ordinary conditions the tranquilizers neither speed up production nor increase growth gains in poultry. But given unusual conditions, such as high-strung game birds, or broilers in hot weather, the tranquilizers apparently have a real place.

Dr. Morley Kare, Cornell, has shown us that chickens can taste. Look to the use of **appetite stimulants** in poultry feeds. Or at least, if they are not used in the feed, they may be used in the drinking water. Flavors have only a temporary effect. The stimulating effect wears off after 5 or 7 days.

We will have a great variety of **medicinals** and **growth stimulants** in our feeds in the future. For example, the time will come when we will be adding **terephthalic acid** to help make the antibiotics do their job better. Still another example of a possible new additive is **calcium lactate pentahydrate.** Preliminary work, reported from England, tells us that this additive increased the rate of production in laying hens by 10.7%.

Still another "new" in the feed bag is likely to be **toasted unextracted soybean meal.** At least one report from the Delmarva Peninsula indicates that toasted unextracted soybean meal is being used by a major broiler producer. Whether or not this product will find extensive use is a matter of simple economics. If toasted unextracted soybean meal can be used more economically than fat and conventional soybean oil meal, the time will come when it will indeed be used extensively.

I do **not** predict a bright future for **unidentified growth factors.** They have haunted us long enough. Such trace minerals as zinc, molybdenum, selenium, boron and inorganic sulphur will do much to bring an end to these ghosts. For a good while they will continue to be troublesome in the formulation of breeder feeds. They will be troublesome only because it takes us so long to ascertain the value of crude sources of unidentified factors in breeder feeds. It looks now as if we can get along without them very nicely in broiler and layer feeds.

In the future, more and more use will be made of the **electronic computer** as a tool in the formulation of feeds. The reason for this is simple. The arithmetic of feed formulation is so involved that the human mind cannot do the job nearly as well as the electronic computer. I am told that some 34 trillion different combinations can be derived from 10 ingredients being used to supply 6 nutrients at a specified level. There is little doubt that the electronic computer can pick out the answer more quickly, more accurately, and much more economically than can the mathematician.

One of these days we are going to **quit wasting so much protein.** It seems apparent that with "properly-balanced" protein we can **cut back** the amount of protein used in a poultry diet from say 20% to 18%. We can cut back that much on the protein and still have the second limiting amino acid adequately supplied. The "effective" protein will be maintained at its original level—through the use of synthetic methionine, the first limiting amino acid.

And in discussing this matter of waste, we need also to take a crack at **phosphorus and calcium.** Work in Canada shows that the phosphorus requirement of the laying hen is about one third less than we had heretofore thought. This work has been repeated in the U.S. Likewise, we have been "mineralizing" our broilers too much with a calcium level of 1 to 1.2%. Some will argue that a large amount of calcium might just as well be added since it's inexpensive. But remember that being overzealous with the calcium carbonate cuts down on the amount of "room" in the diet for high-energy ingredients like wheat and corn. So when you get too liberal with the calcium carbonate, it means you have to also add fat to make up for the corn that was taken out when the calcium carbonate was added. And fat is mighty expensive. We must also take a good, hard look at **vitamin fortification levels.**

I don't mean that we should be penny wise and pound foolish with our vitamins. Some extra vitamins are needed to help the birds during stress periods, to compensate for the fact that different strains of birds have different vitamin requirements, and to give sufficient allowance either for vitamin destruction in the feed or poor mixing—but we must bear in mind that overfortification is the penalty we pay for ignorance. Careful research will help us keep on the straight and narrow.

In the feed bag of the future there are some other things that we will put aside. Let's face it. We are still going along with some "old wives tales." What about this matter of using copper sulphate in the feed? A good "cure-all," but does it do any good? And what about "flushing" the birds? Ever see any scientific data that flushing a bird helped any? It was all right in yesterday's poultry business when there was nothing better to do. It did help the poultryman a little—and harmed the birds only slightly.

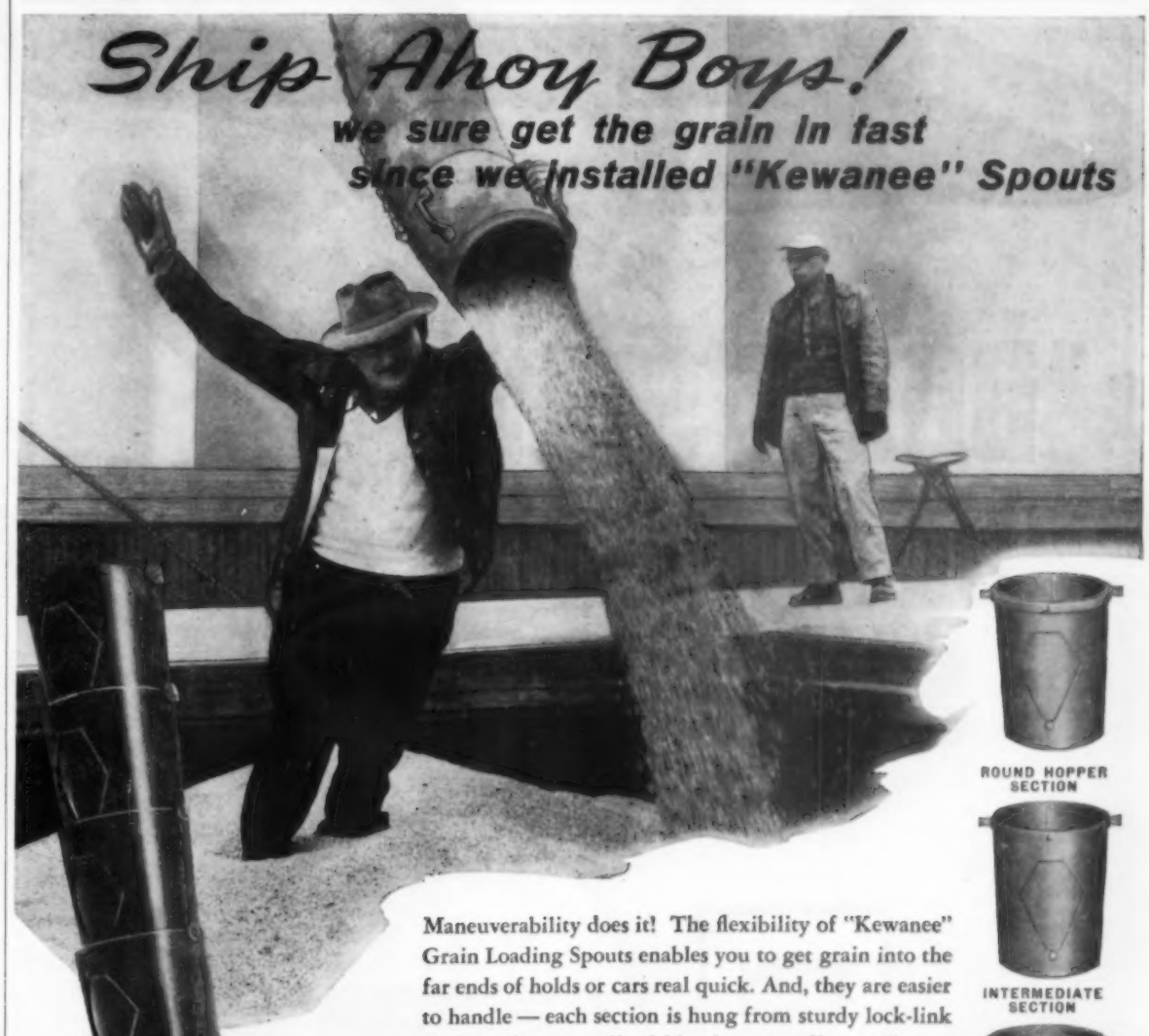
LOOK TO INNOVATIVENESS: For business growth and profits, look to innovativeness. Ideas are your diamonds. If you are conducting your

Make Your Customers
GOOD Customers... all year 'round

SUPREME Brand
Condensed BUTTERMILK

HERBERT K. CLOFINE, Inc.
MILK PRODUCTS
315 South Smedley St. Phila. 3, Pa.

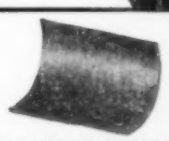
Ship Ahoy Boys!
we sure get the grain in fast since we installed "Kewanee" Spouts



ROUND HOPPER SECTION
INTERMEDIATE SECTION
HANDLE SECTION
SQUARE HOPPER SECTION

Maneuverability does it! The flexibility of "Kewanee" Grain Loading Spouts enables you to get grain into the far ends of holds or cars real quick. And, they are easier to handle — each section is hung from sturdy lock-link chain and nests well within the succeeding section to control the flow of material. "Kewanees" also save on replacements because of their patented "renewable" bottoms. "Kewanee" Spouts offer extra protection which you do not get with conventional spouts. The top hopper and lower sections are well reinforced for added service.

Here's what makes the renewable bottoms so good! They are made of "Hy-Loy" abrasion-resisting steel which gives them extra toughness. They literally fight wear — all for your benefit.



IT'S THE RENEWABLE BOTTOMS THAT TAKE ALL THE WEAR.

Insist on "Kewanee" Spouts — you will be money ahead. Stocks located at convenient centers assure quick shipment.

Kewanee
Flexible Grain Loading Spouts

Screw Conveyor Corporation
704 HOFFMAN STREET • HAMMOND, INDIANA
WINONA, MISSISSIPPI — SANTA CLARA, CALIFORNIA
ENGINEERS — HAMMOND PRODUCTS — MANUFACTURERS

feed business today, as you did 10 years ago, you're at least 9 years behind the times. Incidentally, that statement applies to more than the feed business—any profitable business today is dependent upon innovativeness for its status.

As the manager of your feed business, or some department of your company, you are the one you should look to for inventive ideas. You owe it to yourself to think and be creative. All of us have a little creativeness in us—and it behooves us to eke every last drop of said creativeness out of ourselves. At any idle moment, whether in the bathtub, shaving, awakening in the morning, or even perhaps in the helter-skelter of the office, think about how you can perform your business operation better. Write down your ideas. Maybe you will collect 25 or 30 fair ideas in a period of a couple of weeks. Cull these closely. Perhaps you will come up with two really good ideas. And then pursue and develop these ideas, holding on as tenaciously as if your life depended upon their proper crystallization.

If you are convinced that you and your business associates are sterile when it comes to innovation, then I have a prescription for you: Get some bright young men in—let them know you're looking for innovativeness, and then don't get alarmed if they shoot a little wild on occasion.

Don't think for a minute that you're going to find an idea man in a 100% conformist. Yes, you can make a conformist out of an idea man in a hurry—but you're apt to hurt your business if you do so. By all means, get a man who is "problem sensitive." Get a man who mentally questions everything. And when I say, get a man who questions everything—I don't mean an **argumentative negativist.** Along with your bright young man being "problem sensitive," he should have a positive attitude. And the best definition I have heard yet for a positive attitude is a state of mind in which you "expect what you hope."

OUR FEED BUSINESS TOMORROW: Earlier I indicated that poultry operations would get larger. There is a definite move for everything to get larger—except feed mills. Be thinking in terms of a relatively **small feed mill**—which can adequately handle, by bulk, a goodly portion of the business within a 20 mile radius.

And if you are going to contract poultry, be very careful in your **selection of sales-service personnel.** There is something about the chemistry of a salesman which generally makes him a poor service man in a contracting operation. And likewise, it is infrequent that a good service man is also a super salesman. You will probably find yourself money ahead if you keep sales and service pretty much divorced.

With all of the innovations, both in poultry management as well as in the feed bag, we still cannot get away from this matter of human insufficiencies. If you find yourself tied in with a contracting operation, you will no doubt find it imperative to **"ride herd"** from time to time on **growers.** This can be done readily through the development of a contract which pays an incentive that is attractive only to the good growers. Poultry mismanagement in the form of waterers that "won't work when they should," and "feed that wasn't fed because I just didn't know I was going to be out so soon," can spell nothing but red ink.

After all is said and done, this poultry business, like most any endeavor, calls for a bit of **showmanship.** This matter of showmanship is particularly important in selling. And I submit to you that there is no better way to show poultry people what your feed can do than through a good service program. This means the education of salesmen so that they are sufficiently well versed in poultry husbandry to help Mr. Poultryman do a genuinely good job.

In tomorrow's business, I believe you will find yourselves more and more in the field of **merchandising** both **poultry and eggs.** This may call for a new arm of your business—or at least a good promotion man who can elicit a tie-in. Fortunately, nature has been kind to us in giving us products of great merit which do much to sell themselves. Tasty poultry meat, high in protein and low in calories, is a natural on today's market. Eggs, likewise, have their health-giving attributes. I predict that the food faddists with their egg-cholesterol scare will soon roll out of the picture.

YOUR POULTRY RESEARCH OF THE FUTURE: Many firms have their own poultry research farms. I certainly believe this should be encouraged. As a feed industry group, we spend relatively little on research. Only about 0.2% of the gross sales dollar is spent on research by feed companies. This is admittedly a puny amount. The food and beverage industry, as a whole, spends approximately 1%. We of the feed industry are stymied, to a certain extent, because we operate on an extremely low profit margin. Thus, our volume is high compared with our net proceeds.

In discussing research farms, there is one point I would like to emphasize. Don't kid yourselves. Many of you, rather than having research farms, have demonstrations farms. There is nothing wrong with demonstration farms. They undoubtedly impress customers and make them think that you genuinely have their interest at heart.

But please bear in mind that in order to conduct good **research,** your experimental variables must be replicated many times. If you replicate less than 5 times, with 50 birds per variable, you are getting data which are not very meaningful.

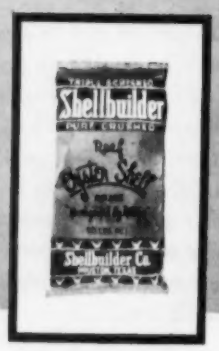
It was Jesse Hobson, director of Stanford Research Institute, who once said, "The biggest gamble is to do no research at all." His point, and the connotation of his statement, is well taken. However, I submit to you that there is a bigger gamble and that is this: "The biggest gamble is to do poor research." Poorly conducted research can be much worse than no research at all.

CAPAY MILLING INCORPORATED

ORLAND, CAL.—The Capay Milling Co. has been incorporated in Orland. Principal shareholders include Jon and Hazel Bambauer and Edward F. Faust.

Shelley says

"DON'T SELL SUMMER SHORT"



Laying feed sales are becoming less and less seasonal. Hundreds of our dealers report that Shellbuilder sales during June, July and August are better than ever. Buy Shellbuilder now for extra profit. Don't run out. Be ready for those early fall sales, too.

SHELLBUILDER COMPANY • 1305 PRAIRIE AVE. • HOUSTON, TEXAS / *Pure crushed reef oyster shell*

Worth Crowing About!!

FEEDSTUFFS WANT ADS

It's continuous!

The supply just never ends! As with Solulac, the performance goes on every week. Yes, production is continuous, every week of the year. So you can formulate your feeds with these balanced corn distillers solubles and be sure of a continuous supply. You can get the high nutritional values of Solulac, its GFF (Grain Fermentation Factors — unidentified growth factors found exclusively in Distillers Feeds) and vitamins on a 100% dependable basis. Guaranteed to be free flowing. Fifty and 100-pound bags or bulk carloads. Just write, wire, or phone. And remember, Grain Processing Corporation is also a continuous source of corn distillers dried grains.

Copyright 1959

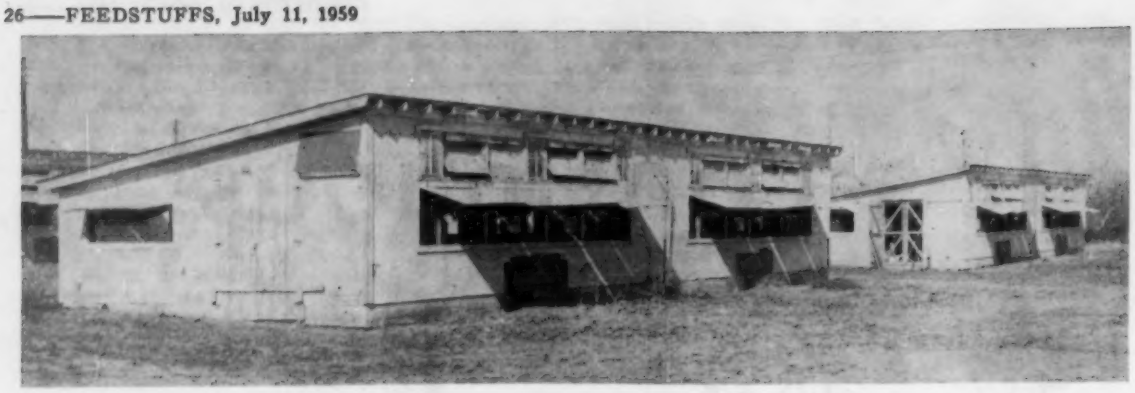
GRAIN PROCESSING CORPORATION

MUSCATINE, IOWA • Telephone AMherst 3-1321 TWX 495

Primary Fermentation Products

Member of the DISTILLERS FEED RESEARCH COUNCIL

Riboflavin — Vitamin B-12 — Bacitracin — GP-101, source of whey and other unidentified growth factors.



LAYING HOUSES—Two of the shed-type laying houses used by Power Feed Mills, Abilene, Texas, are shown here. The houses, originally used for broiler and turkey production, were constructed in 1947. A floor system is now used in the houses for egg production.

Feed Firm, College in Texas Cooperate in Poultry Project

By HENRY WOLFF
Special Correspondent

ABILENE, TEXAS — When the idea for an experimental commercial egg production project was born here about two years ago, the situation at hand pulled together Power Feed Mills of Abilene and Abilene Christian College. What one didn't have to get the program started, the other had. So it seems only natural that the two got together to get the job done.

Though Abilene Christian College is no longer connected with the project, as a whole the program worked out satisfactorily. The college derived benefits through practical experience for students majoring in agriculture and from a financial standpoint. Power Feed Mills gained considerable knowledge in poultry management practices, nutrition, production costs and in other flock management areas. And there has been financial reward for the company, too.

Harry W. Dobbyn, Power Feed Mills president, recalls that when the project was first mentioned as a possibility his firm had the poultry houses, but didn't have the labor. The college had students looking for work, but didn't have the facilities for such an operation.

The broiler market was too low at the time, so it was decided that the project would involve egg production. In October of 1957 the program was begun.

50-50 Arrangement

The agreement between Abilene Christian College and Power Feed Mills was 50-50 from the beginning. Mr. Dobbyn explained that all costs, including labor, chicks, feed, medications, utilities and rent were "put into one pot" and profits from the eggs were credited to this joint account. Profits and losses were split equally between the college and the feed company. The college was responsible for furnishing the labor and Power Feed Mills furnished the houses and the equipment on a rental basis.

James W. Dobbyn, Power Mills vice president, noted that a floor system has been used from the start for the 2,600 934-A Hyline layers which last month were still at 69% of production.

"The floor plan seems to be best suited for this particular area of Texas. . . . We have found no reason to believe otherwise," he said. The per cent of checked and dirty eggs has been below average, and egg quality has been above average. Labor costs may be higher than they would have been with a cage operation, but Jim Dobbyn believes that the small amount of "extra" labor hasn't been enough to offset other advantages of the floor system.

Tim Mason, agriculture instructor at Abilene Christian College, agrees with Mr. Dobbyn, expressing the opinion that the floor plan has proven very successful and has been less expensive to operate than a cage system.

Chicks for the project were bought from Wilson Hatchery of Clyde, Texas, and put down in November, 1957. Held off as long as possible, the chicks went into production approximately 22 weeks after arrival. The production peak came at 28 weeks when the birds were laying 91%. This peak was held for about eight weeks, and then production tapered off very gradually to the present rate of 69%.

The birds are now about 19 months old, and will be replaced by Aug. 1 with a later developed strain, 934-C.

Until recently, three Abilene Christian College students majoring in agriculture worked mornings and evenings feeding and watering the birds, gathering eggs and doing other chores around the layer houses. Power Feed Mills furnished the students living quarters on the farm. In addition, there was another part-time laborer who worked during the day and made only one gathering of eggs each day. Now that the college is no longer associated with the layer project, Power Feed Mills has a full-time man handling the entire operation.

Broilers were once housed in the buildings used for the egg plant. Bulk feed is delivered to the farm and fed to the layers in hoppers. The hens are watered with an automatic system. The birds get an early start at the feed hoppers. Lights in the houses go on at 2:30 a.m.

Eggs were gathered three times a day until recently when warmer weather arrived. Now eggs are picked up four times a day.

Within 24 hours after they are gathered, the eggs are processed by the U.S. Department of Agriculture grading station at Power Mills and

INSTRUCTION—Tim Mason (left), instructor of agriculture at Abilene Christian College, shows Cleve McMillion, senior animal husbandry major, the best way to handle eggs in the egg room of the poultry farm which, until recently, was operated jointly by the college and Power Feed Mills. Mr. Mason notes that there has been a minimum of egg breakage due to good nutrition.

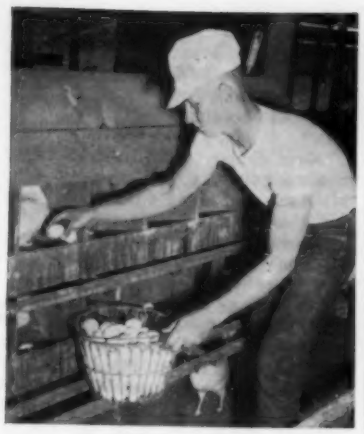
FEED TALK—Marvin Weber (left), head of the service department, Power Feed Mills, Abilene, gets together with Jim Dobbyn, vice president, for a chat about poultry rations the firm distributes in Texas. They are looking at a sack of Super Layer, a ration used at the farm's experimental poultry farm, which, until recently, had been operated in conjunction with Abilene Christian College.

NEW! Portable Electric Bag Closing Machine

HERE is a handy little machine that makes bag closing fast, easy, and economical. It is recommended where operations are limited or intermittent and do not justify installation of large, high production machines.

- **LIGHTWEIGHT**—9½ pounds. Carry it anywhere. No installation; requires only an electrical outlet.
- **POWERFUL**—Exclusive top and bottom feed for greater power and production. Direct drive motor with thumb control button.
- **VERSATILE**—Closes bags made of cotton, burlap, jute, multiwall paper, laminated paper. Produces two-thread stitch Type 401, or can be furnished to produce single-thread chain stitch Type 101.
- **SAFE**—Anyone can operate it. No special training required. Can be obtained with overhead suspension. Also, can be supplied with pedestal bracket. Send for descriptive literature.

Union Special® MACHINE COMPANY
Originator of Filled Bag Closing Machines
413 North Franklin Street — Chicago 10, Illinois



CHORE TIME — One of three Abilene Christian College students who for a time were employed by the layer project operated jointly by the college and Power Feed Mills gathers eggs from nests. Here, Cleve McMillion gathers part of the 1,700-egg crop for the day.

sent on their way to consumers throughout west Texas under the "Freshest Brand Eggs" label of Tender Fry Farms.

Three years ago Power Feed Mills was processing 25 cases a week in its egg room. Today 600 cases leave the plant for retail outlets each week. The company's trade territory extends south to Del Rio, west to Van Horn, north to Munday, east to Eastland and southeast to Johnson City.

The Dobbyns said eggs produced in the experimental project have always been of exceptional quality. "A nutritionally balanced feed, good management and a high type of laying hen are each within itself essential to a profitable egg laying program," Jim Dobbyn commented.

Three fourths of the ration fed the birds consists of a 20% protein laying feed, and the remaining 25% is milo.

Costs Figured

It was explained that the cost per dozen eggs, figuring rent, utilities, chicks, feed, labor, depreciation and medications has averaged about 29½¢. Expected complications that arose due to inexperience of the college students employed accounted for a cost of 1.1¢ doz. Even so, these same complications probably would have occurred even in a program where the training of young men was not involved.

The houses are equipped with 40 nests each, or one for every five layers. The nests are back-to-back with wire between to permit proper ventilation. It is believed that the birds would not lay as well when crowded into dark, closed-in nests.

The old birds are now being culled heavily and it's time for cleaning and spraying the houses. Using proper management and good sanitation practices makes it unnecessary to clean the houses before the old birds are moved out for new stock, the Dobbyns said.

After the original flock is culled down to about a thousand birds, 16-week-old pullets will be moved in. These pullets are being raised by M. A. Cox, Robert Lee, Texas, poultryman whose entire operation is devoted to starting pullets for laying flocks. Mr. Cox grows approximately 8,000 of these pullets at a time for Power Feed Mills. These birds will be expected to produce for at least 14 months without culling.

The present flock started laying in May of 1958. Mr. Mason of the college staff said recently that he believed he had less than 20 birds that should be culled.

Very few problems have beset the operation, but an outbreak of cholera cut production from 70% to 10% for two days last December. Treatment was instigated immediately, and only 13 birds died of the disease.

As chicks, the birds were vaccinated for the common poultry diseases. There have been losses in addition to those caused by the cholera, but to no greater extent than found in any average poultry enterprise.

Power Feed Mills is the former Texas Mill & Elevator Co. and was purchased by the Dobbyns in 1946. The name was changed in 1951, when production of Power brand feeds was started.

Stockyard Firm Enters Feeder Pig Business

CLEVELAND, OHIO—The Cleveland Union Stockyards Co. recently started handling feeder pigs for the first time in its 80 years of operation, according to Philip H. Coad, president.

The Consolidated Commission Co., one of the concerns that sell livestock at the yards, will handle the pigs.

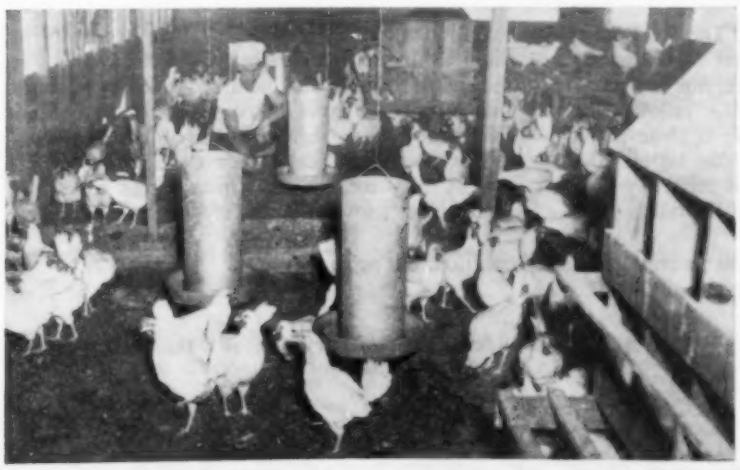
Some stockyards handle feeder pigs, while others do not, Mr. Coad noted, and added that by one means or another there is considerable business in the breeding of pigs and selling them to others for fattening. He commented that demand for feeder pigs is heavy because of a plentiful feed supply.

The first shipment of feeders, weighing 40-50 lb., is from Wisconsin. After being "farmed out," they will be returned to the yards weighing 180-200 lb.

The firm has been buying and farming out feeder cattle for many years.

MOUREN GRAIN OPERATING

COALINGA, CAL. — The Mouren Grain Storage, Inc., is now operating in Coalinga, capitalized at $75,000. Principals in the establishment include Joseph Mouren, Huron Mouren, William J. Mouren and Howard E. Mouren.



HOUSE INTERIOR—Cleve McMillion, Stafford, Texas, animal husbandry major at Abilene Christian College, is surrounded by some of the 2,600 layers which have been a part of the experimental poultry project started by the college and Power Feed Mills, also of Abilene. Cleve is one of three college students who, until recently, helped take care of the project. The other students were Billy Penn, Lufkin, Texas, and Dean Moverly, Palestine, Ill. The college is no longer associated with the project.

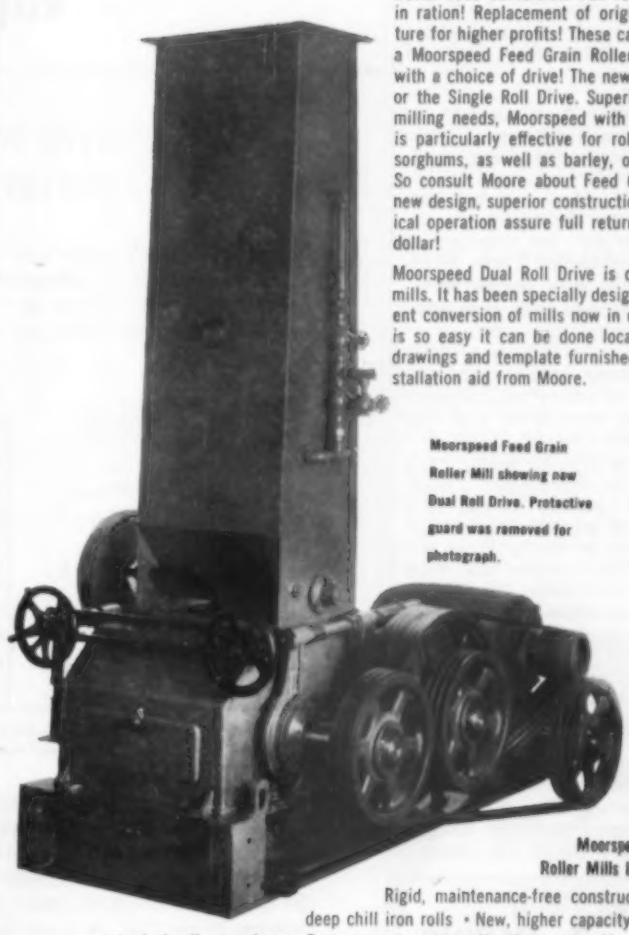
ACE BRAND ROLLED OATS
(STEAMED ROLLED)

Feed manufacturers have proven that Ace Brand's superior quality at a competitive price is the answer to today's demand for lower feed cost.

Phone: FRanklin 4-2142 Teletype: MP477

FRUEN MILLING CO. Fruen's
MINNEAPOLIS, MINN.

MOORSPEED
INCREASES OUTPUT WITH NEW DUAL ROLL DRIVE!



Moorspeed Feed Grain Roller Mill showing new Dual Roll Drive. Protective guard was removed for photograph.

Better feed conversion! Full retention of grain in ration! Replacement of original grain moisture for higher profits! These can be yours with a Moorspeed Feed Grain Roller Mill . . . now with a choice of drive! The new Dual Roll Drive or the Single Roll Drive. Superior for all grain milling needs, Moorspeed with Dual Roll Drive is particularly effective for rolling corn, milo, sorghums, as well as barley, oats, and wheat. So consult Moore about Feed Grain Mills. Our new design, superior construction, and economical operation assure full return on every feed dollar!

Moorspeed Dual Roll Drive is optional on new mills. It has been specially designed for convenient conversion of mills now in use. Installation is so easy it can be done locally with simple drawings and template furnished free as an installation aid from Moore.

Moorspeed Feed Grain Roller Mills Lead the Field!

Rigid, maintenance-free construction • Solid, deep chill iron rolls • New, higher capacity self-aligning spherical roller bearings • Fast, accurate, easy roll adjustment • Manual throwout lever with lever lock • Higher steaming capacity.

MOORE DRY DOCK COMPANY

Foot of Adeline St., Oakland 23, California Higate 4-3919

Reid-Strutt Company, Inc. 1015 S. E. Stark St. Portland, Oregon
Reid-Strutt Company, Inc. N. 8 Lee Street Spokane, Washington
Halverson Corrugating Works 232 Lucy Avenue Salt Lake City, Utah
Sprout, Waldron & Company, Inc. 66 Logan Street Muncy, Pennsylvania

Send inquiries to nearest dealer or Moore Dry Dock Co., Adeline St., Oakland, Calif.

☐ Please send free information on Moorspeed Feed Grain Roller Mills. No obligation, of course.

☐ Please send conversion information on new Dual Roll Drive for existing Moorspeed Mills.

NAME_____
ADDRESS_____
CITY_____
STATE_____

JOE BROOKS

BY AL P. NELSON

People Like to Look At New Things

Milt Peters was walking down the street of Hansen's Creek after the first show at the Bijou, his favorite redhead hanging onto his arm, and he knew that a lot of the local boys were watching him enviously. Some perhaps were saying to themselves, "What has that guy got that I'm not blessed with—to get so many fiery redheads?"

It was true that Milt spent a lot of money on dates with redheads—you don't get into movies for free and redheads, he found, have quite an appetite for 65¢ sundaes, and they usually develop an appetite for steaks if they are kept out too long.

Now Milt and his date passed the brilliantly lighted windows of the Leader Department Store. Milt suddenly looked at a display of a girl in a bathing suit, and he whistled loudly.

He felt a jerk on his arm, and his redhead said, "Milt, don't ever do that again."

"Why not?"

The redhead looked poutish. "I only want you to whistle at me. That—that girl is only a cold clay model."

Milt grinned. "And you are **not**, eh? Well, thanks for tipping me off, Sugar. I really was not whistling at the bathing suit model. I was whistling because she gave me an idea!"

The redhead's eyes went wide open. "Idea? What kind?"

"Easy, Sugar, not what you think. Suddenly, looking at her and that sign near her 'It's New' makes something tick in my head, and Joe Brooks is gonna like it."

"Oh, no!" the redhead wailed. "It's not one of those nights again, I hope. I can't stand listening to you rave about the feed business again, and how you people at the mill can sell more goods. The way you talk, your ideas should have made Joe Brooks a millionaire a couple of times."

"Just give us time, Sugar, just give us time," Milt counseled patiently. "Rome wasn't built in a day; neither was Hansen's Creek. We're 75 years old, I believe, and finally we've got a new courthouse. Let's go eat a hamburger and a malt. I wanna talk this over with you."

The redhead wiggled a little in her tight blue dress. "I'm real hungry, Milt. I think I could eat even a steak." She gave him a sidelong glance.

"Oh, never," Milt said, with an appreciative glance at her slim figure encased in the blue dress. "Steaks make you gain weight, dear, and you're just right now. But not another ounce. Let's go into Happy's. He makes good hamburgers, and I can charge 'em until next payday."

They slid into one of Happy's high walled booths. The redhead was still a little pouty. "But—but can't we go and park out on Moonlight Beach afterwards?" she asked. "It's a wonderful night to look at the water."

Milt grinned. "Sure, sure, Sugar. Yeah, two hamburgers and two cherry malts, Happy."

"I want a pineapple malt," the redhead said.

Milt smiled tolerantly. "Okay, a pineapple. Happy, ain't that like a woman? Always wanting something different."

The redhead smiled at this tribute to her sex, and had a look in her eyes, "We know how to handle men, dear, but we don't always tell them how."

"Now, Sugar," said Milt in a big businessman way, his eyes glowing, "sit back and relax while I tell you this idea."

The redhead sat back and following the manner of her sex, feigned a look of yielding placidity, while Milt expounded his idea. "It's like this," he said. "People are always interested in what's new. Lots of merchants have things that are new, but they forget to tell customers they've got it."

"Can't customers look for themselves?" put in the redhead lazily. "I do. When I go into a dress shop they don't hide anything from little ol' me. I go over the dresses on the rack, one by one till I find what I want."

"Well, you are a woman," Milt conceded. "I'm talking about men—

HAVING COB PROBLEMS?

STOP THEM WITH A THORO-SPEED

★ COB CRUSHER ★ COLLECTOR
★ COB BLOWERS ★ ELBOWS
★ COB BIN UNLOADER

Write For Complete Illustrated Catalog 1-A

Everything for Mill and Elevator Operation

THORO-SPEED CORPORATION
YELLOW SPRINGS, OHIO

FROM ONE EXPERIMENT

How an independently conducted supplied important comparative

1. THE INADEQUACY OF CAROTENE AS A SOURCE OF VITAMIN A

THE STUDY Five lots of day-old Single Comb White Leghorn chicks were fed a basal diet containing appreciable amounts of pro-vitamin A in the form of yellow cornmeal (50% of diet) and alfalfa meal (2.5%). One lot received the basal diet only—four lots graded levels (600, 1200, 1800, 2400 USP units per lb.) of vitamin A derived alternately from Nopcay Type V and fish liver oil.

Less than at hatching time!

Lot No.	Diet and/or Product Fed	Level of Vitamin A Fed (IU per lb.) from carotene	Level of Vitamin A Fed (IU per lb.) from preformed A	Total A Ingested	5-wk. liver storage (IU/liver)	% Ingested A Stored in Liver
1A	Basal diet only[1]	1850[2]	0	3570[3]	32	0.9
B	Basal diet only	1850	0	3535	41	1.2
2A	Nopcay Type V	1850	600	1213[4]	96	7.9
B	Fish liver oil	1850	600	1167	54	4.6
3A	Nopcay Type V	1850	1200	2381	229	9.6
B	Fish liver oil	1850	1200	2515	92	3.7
4A	Nopcay Type V	1850	1800	3670	585	15.9
B	Fish liver oil	1850	1800	3634	131	3.6
5A	Nopcay Type V	1850	2400	5064	915	18.1
B	Fish liver oil	1850	2400	5326	237	4.4

[1]Contained 50% yellow cornmeal and 2.5% alfalfa meal as carotene sources. [2]Conservative estimate. [3]From carotene sources. [4]Based on preformed vitamin A only (does not include amount derived from corn and alfalfa meals.)

DISCUSSION 1. *Carotene.* The inadequacy of carotene is strongly emphasized in this study. The basal diet was a balanced diet, not a vitamin-A-deficient diet. It contained 50% yellow cornmeal and 2.5% alfalfa meal. This is close to the maximum possible carotene that can be included in a balanced diet. In spite of this relatively large amount of pro-vitamin A, however, the ration failed to produce any increase in vitamin A activity in the liver. In fact, though the weight of the chicks at the end of 5 weeks had increased to about 10 times that at birth, the livers did not even contain the vitamin A they had to begin with (60-80 IU is normal).

It is evident that chicks convert carotene to vitamin A very inefficiently. Under stress conditions such a diet provides no safety factor whatsoever.

Further studies are to be made available on this phase of nutrition. But as an interim report, this study makes an important point:

CONCLUSION NO. 1 Carotene is poorly utilized and is of very limited value as a vitamin A source for chicks

Basic producers of Micratized® Vitamins A and D, niacin, calcium pantothenate, choline chloride, and other products

mostly farmers. They walk into a salesroom in a feed mill, and they don't know what's new. They'll never ask. It's the job of the feed dealer and his employes to tell 'em. And we have been falling down on our—I mean, on this job. And so we've missed sales."

"And what are you gonna do about it, honey boy?"

Milt straightened. "What am I gonna do? Why I'm gonna get a $10 or $15 bonus—you watch—from Joe by suggesting to him that we clip those nice reader items in the 'What's New' sections in farm and trade magazines. And that we paste them on nice sizable white pieces of cardboard. We can tack those pasted cardboard items on the warehouse walls where farmers stand around waiting, or on walls in the salesroom. Farmers are nosey, just like anyone else. They'll look at these 'What's New' items, and some of them will buy on impulse."

"What's buying on impulse, honey boy?"

Milt took her hand and squeezed it. "I'll explain more fully later on, Sugar. But for now, buying on impulse is when a farmer sees something advertised, or something displayed and says to himself, 'Gosh, I need that item. Reckon I'll buy it.' "

"Oh, I spend most of my money that way," said the redhead. "That's my failin'."

"Now this deal ain't gonna cost Joe very much. Just the cost of the cardboard and the time clipping items and pasting them on the cardboard. We can carry some typed copy there, too, saying 'Either we got it in stock or can get it for you fast.' Why we can feature a lot of new items like that."

"You get so excited about that little ol' feed business, honey boy," said his redhead. "Why don't you get that way about me?"

"Just be patient, Sugar. Just be patient. I'll bet Joe's sales will go up using my idea. Lots of farmers will get additional buying notions. Joe could also set up a special table and display a few of these new products which we have in stock, and also his new feeds as he introduces them. A 'What's New' sign over the counter would help. Sugar, I feel like going right over to Joe Brooks' house tonight yet and telling him about it. Mind if I take you home now?"

"Mind!" the redhead's eyes flashed and she sat up stiffly. "What—what about Moonlight Beach?"

Milt looked at the flashing eyes. "Why of course, Sugar," he said. "Moonlight Beach! That's more important tonight. After all, the feed mill is closed until tomorrow morning!"

CHARTERS GRANTED

TOPEKA, KANSAS — Fremont County Grain, Inc., Salina, has been granted a charter for a general grain merchandising business. Frank J. McBride has been named resident agent. Capitalization of $100,000 was authorized. Lanham Grain & Supply Co., Inc., Washington, has been granted a charter for a grain sales and storage business. Ralph L. Davison has been named resident agent. Capitalization of $100,000 was authorized.

NTF, PENB Sponsor Turkey Promotion Luncheon in Chicago

CHICAGO—Key press, food, merchandising and promotion people attended a recent luncheon at Chicago's Conrad Hilton Hotel and were shown the latest turkey products for domestic and institutional use. The affair was sponsored by the National Turkey Federation and the Poultry & Egg National Board.

Among items on exhibit were 9-lb. frozen turkey rolls and individual-sized boneless turkey fillets. Other spotlighted products were pre-packaged frozen turkey quarters and halves, cut-up turkeys and fryer-roaster turkeys, as well as turkey dishes developed in the PENB kitchens.

A buffet luncheon, featuring PENB's new turkey meat cocktail squares as an appetitizer, followed a social hour. Luncheon dishes included turkey hash supreme, anniversary turkey salad, fried turkey and lemon fluff pie, all PENB recipes.

M. C. Small, executive secretary of NTF, stated that the exhibits are evidence of the interest of food and communications groups in the more complete merchandising of turkey and new turkey products.

Mr. Small pointed out to guests that most of the turkey products on display are now available to consumers in some areas, and distribution is being continually improved. He also emphasized that turkey is now a plentiful food throughout the year. In especially good supply at this time, according to Mr. Small, are the popular 4-16-lb. family-size birds. The abundance of the large turkeys is expected to rise sharply within the next few months. Breeding and diet control have made today's turkeys uniformly excellent eating, Mr. Small concluded.

New Processing Plant

CARTHAGE, MISS. — A proposed broiler processing operation in Leake County has been approved by the executive committee of the agriculture and industry board. The R&R Packing Co. would afford employment for 100-125 persons with an annual payroll of $250,000, and would have an immediate capacity of 125,000 broilers a week. The plant would be located in Carthage.

Final approval requires a vote of 51% of the qualified voters in the county, with two thirds of the 51% favoring the proposal.

. . . A DOUBLE RESULT

study by a Midwest feed manufacturer* data on vitamin A utilization . . .

Name on request

2. THE OUTSTANDING EFFECTIVENESS OF NOPCAY® TYPE V AS A SOURCE OF VITAMIN A

THE STUDY Five lots of day-old Single Comb White Leghorn chicks were fed a basal diet containing appreciable amounts of pro-vitamin A in the form of yellow cornmeal (50% of diet) and alfalfa meal (2.5%). One lot received the basal diet only—four lots graded levels (600, 1200, 1800, 2400 USP units per lb.) of vitamin A derived alternately from Nopcay Type V and fish liver oil.

Twice as effective!

Lot No.	Diet and/or Product Fed	Level of Vitamin A Fed (IU per lb.) from carotene	Level of Vitamin A Fed (IU per lb.) from preformed A	Total A Ingested	5-wk. liver storage (IU/liver)	% Ingested A Stored in Liver
1A	Basal diet only[1]	1850[2]	0	3570[3]	32	0.9
B	Basal diet only	1850	0	3535	41	1.2
2A	Nopcay Type V	1850	600	1213[4]	96	7.9
B	Fish liver oil	1850	600	1167	54	4.6
3A	Nopcay Type V	1850	1200	2381	229	9.6
B	Fish liver oil	1850	1200	2515	92	3.7
4A	Nopcay Type V	1850	1800	3670	585	15.9
B	Fish liver oil	1850	1800	3634	131	3.6
5A	Nopcay Type V	1850	2400	5064	915	18.1
B	Fish liver oil	1850	2400	5326	237	4.4

[1]Contained 50% yellow cornmeal and 2.5% alfalfa meal as carotene sources. [2]Conservative estimate. [3]From carotene sources. [4]Based on preformed vitamin A only (does not include amount derived from corn and alfalfa meals.)

DISCUSSION 2. *Preformed Vitamin A (Nopcay Type V vs. Fish Liver Oil).* This study provides excellent substantiating evidence of the superior biological effectiveness of Nopcay Type V over fish liver oil (both are sources of preformed vitamin A). Although each of these products was added to a basal diet *containing appreciable levels of carotene,* the data above are reported on the basis of preformed vitamin A intake only. This is done to present a clearer indication of the relative performance of Nopcay Type V and fish liver oil. It is obvious that the very low level of liver storage due to carotene intake would have almost no effect on the overall picture.

An interesting comparison can be made of the results of Nopcay Type V fed at half the quantity of fish liver oil. Nopcay Type V fed at the 600-unit level compares favorably with fish liver oil at 1200. Nopcay Type V at 1200 matches fish liver oil at 2400.

CONCLUSION NO. 2 Micratized® Nopcay Type V is an unusually effective source of vitamin A for chicks, ranking far above carotene and fish liver oil in this respect

NOPCO.

NOPCO CHEMICAL COMPANY

GENERAL OFFICES: 60 Park Place, Newark, N.J. PLANTS: Harrison, N.J. • Peoria, Ill. • Richmond, Calif.

Arbor Acres

Make sure

Your broilers come from ARBOR ACRES females!

MOO--ORE NEWS IN FEEDSTUFFS

Your servicemen are saying these things, too

What will medicated formula feeds *do* for your poultry customers? What *won't* they do?

Ever since you first introduced modern medicated feeds, you have been careful to point out their merits and, at the same time, emphasize that these feeds must never be considered substitutes for good management and sanitation.

Your servicemen have regularly carried this message out into the field.

Cyanamid is carrying the same message direct to your customers in national, sectional and state farm publications. On the opposite page is another in a continuing series of advertisements.

Cyanamid hopes that this advertising series may be helpful in persuading farmers to keep practicing the fundamentals of profitable livestock and poultry raising: Good management, strict sanitation, proper feeding.

American Cyanamid Company,
Agricultural Division, New York 20, N. Y.

Sound combination for profitable poultry raising:

Good management and medicated formula feeds

Today's successful poultrymen have learned through hard experience that these two fundamentals go hand in hand.

These men figure all profit angles. They know that a fraction of a cent can often make the difference between profit and loss. That's why they work closely with their feed manufacturer or feed dealer and rely on the counsel they get.

Medicated feeds

When antibiotics and other additives came along, feed manufacturers quickly saw a new way to benefit their customers. They researched and tested these additives and chose those they found best in order to bring you feeds that promote health and growth at the greatest economy to you.

Later, new experiment station trials revealed that some of the antibiotics at higher levels were effective in preventing or controlling specific poultry diseases. Manufacturers then raised the levels in their feeds and were permitted by the Federal Food and Drug Administration to make disease claims on their feed tags. This led to the now generally-accepted term "medicated feeds." Feed manufacturers, recommending these feeds to you, have been careful to point out what they might be expected to do and what they couldn't do.

What medicated feeds do

If you have been a poultryman for a number of years, you are well aware of the enormous benefits these medicated feeds have brought to you.

You've sent more pounds of meat to market by reducing losses from coccidiosis, chronic respiratory disease, synovitis and stresses in broilers. You've increased egg production through control of these same diseases plus blue comb in replacement flocks. You've expanded to year-round production of turkeys through better control of blue comb, sinusitis, blackhead, hexamitiasis and stresses.

For these reasons, you have welcomed medicated feeds and steadily increased your use of them. Most poultrymen have used these feeds wisely; unfortunately a few have chosen to consider them the *answer to all poultry problems* and have relied upon them to the exclusion of other important factors.

What medicated feeds won't do

No poultryman should place sole reliance on medicated feeds. Actually, they are *only a part* of over-all good management. And good management includes starting with good stock and maintaining proper sanitation, housing, ventilation, etc. These are *essential* to profitable poultry raising. Medicated feeds are not intended as a substitute. In fact, even the best medicated feeds may fail to show good results if management and sanitation are badly neglected.

Service men say the same

The service man, who comes out to see you from your feed manufacturer or feed dealer, tells you all these things. He is working for your interest as well as his company's. Most feed manufacturers are glad to offer you soundly-written, full-of-fact pamphlets and booklets that help you solve management and sanitation problems—and tell you *how* and *when* to use medicated formula feeds. You will find this literature constantly reminding you that good management and medicated feeds *must work together* for genuinely successful results. It will pay you to keep this literature on hand—ask your feed manufacturer, feed dealer or service man for it.

American Cyanamid Company, Agricultural Division, New York 20, New York.

• • •

The statements on this page express the sincere beliefs of American Cyanamid Company, producers of AUREOMYCIN® *chlortetracycline,* ARZENE* *arsenosobenzene,* MEGASUL® *nitrophenide and* ENHEPTIN®-*A 2-acetylamino-5-nitrothiazole . . . all used in manufactured feeds.*

**Trademark*

CYANAMID

Convention Calendar

July 13-14—Feed Manufacturers Conference; R. F. Poole Agricultural Center, Clemson College, Clemson, S.C.; chm., Dr. Victor Hurst, Department of Dairying.

July 17-18—New Mexico Grain & Feed Dealers Assn.; Castaneda Hotel, Las Vegas, N.M.; sec., Parley Jensen, P.O. Box 616, Albuquerque, N.M.

July 21-23—American Poultry Congress and Exposition; Kiel Auditorium, St. Louis, Mo.; exec. sec., Don M. Turnbull, American Poultry and Hatchery Federation, 621 E. 63rd St., Kansas City 10, Mo.

Aug. 3-8—Feed Microscopy Short Course; Texas Agricultural Experiment Station, College Station; chm., E. E. Brown, Asst. State Chemist.

Aug. 4-5—Midsouth Soybean and Grain Shippers Assn.; Hotel Peabody, Memphis, Tenn.; sec., Paul C. Hughes, P.O. Box 692, Blytheville, Ark.

Aug. 4-7 — Poultry Science Assn. (meeting for members and executive committee invited guests only), Iowa State College, Ames; chm., Dr. Robert E. Phillips, poultry department, Iowa State College.

Aug. 7-8 — North Carolina Feed Manufacturers Assn.; Ocean Forest Hotel, Myrtle Beach, S.C.; sec.-treas., A. M. Upshaw, Jr., North Carolina Feed Manufacturers Assn., Box 44, Mocksville, N.C.

Aug. 10-12 — American Soybean Assn. and National Soybean Processors Assn., joint convention; Sheraton-Jefferson Hotel, St. Louis, Mo.; exec. vice president, George M. Strayer, American Soybean Assn., Hudson, Iowa; sec., National Soybean Processors Assn., R. G. Houghtlin, 3818 Board of Trade Bldg., Chicago 4, Ill.

Aug. 11-12 — Wisconsin Nutrition School; Memorial Union, University of Wisconsin, Madison; chm., Dr. Robert H. Grummer, Dept. of Animal Husbandry, University of Wisconsin.

Aug. 17-18 — Kentucky Feed Conference, sponsored by University of Kentucky and Kentucky Feed & Grain Assn.; Brown Suburban Hotel, Louisville; sec., Jack Weber, P. O. Box 425, Lexington, Ky.

Aug. 23-25—Poultry Industries of Louisiana, Inc.; Captain Shreve and Washington Youree Hotels, Shreveport; sec., Clyde Ingram, Louisiana State University, Baton Rouge, La.

Aug. 23-25 — The National Hay Assn.; Sir Francis Drake Hotel, San Francisco; sec., Fred K. Sale, 600 Board of Trade Bldg., Indianapolis, Ind.

Aug. 24-27—Georgia Poultry Institute; Rock Eagle 4-H Club Center; Eatonton, Ga.; chm., Arthur Gannon, Poultry Division, University of Georgia, College of Agriculture, Athens, Ga.

Sept. 3-4—Symposium on Magnesium in Agriculture; West Virginia University, Morgantown, W. Va.; Dr. G. C. Anderson, head, Animal Husbandry Dept.

Sept. 4 — Illinois Cattle Feeders Day, University of Illinois, Urbana; chm., A. L. Neumann, Beef Cattle Division.

Sept. 4—Swine Day; University of Missouri, Columbia; chm., Prof. Leland Tribble, Animal Husbandry Department.

Sept. 9-10 — Pet Food Institute, Drake Hotel, Chicago; sec., Clyde Kassens, 332 S. Michigan Ave., Chicago, Ill.

Sept. 9-10 — Maryland Poultry Service Conference; University of Maryland, College Park; chm., Wade H. Rice, University of Maryland, College Park, Md.

Sept. 9-17 — Illinois State Turkey Growers Assn., farm of Clarence Ziemer, Elmwood, Ill.; sec., S. B. Swann, Kauffman Turkey Farms, Waterman, Ill.

Sept. 13-14—Grain and Feed Dealers National Assn. (work meeting for directors, committees and members), Minneapolis; exec. vice pres., Alvin

New Listings

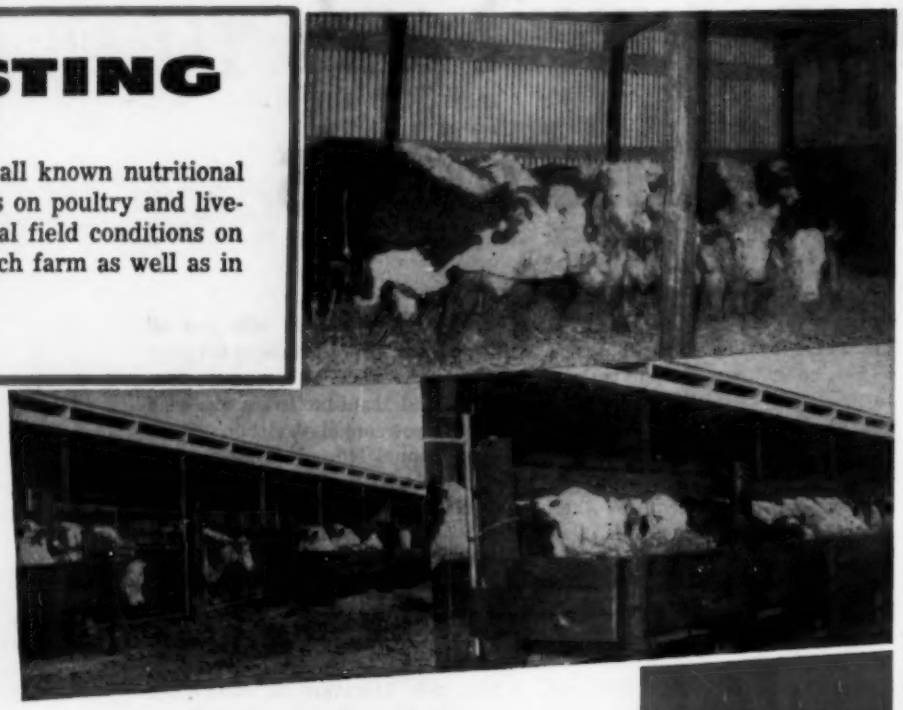
For the convenience of readers who scan the Convention Calendar regularly for new listings, those added to the column in the current week appear separately from ones which have been entered previously. The following week they will be moved to their proper slot where they will remain until the event is held.

● ● ●

Aug. 28—Purdue Swine Day; Purdue University, Lafayette, Indiana; chm., Dr. J. H. Conrad, Animal Science Department.

TESTING

combinations of all known nutritional and other factors on poultry and livestock under actual field conditions on 1600 acre research farm as well as in the laboratory.



+ PERFECTING

fortification formulas, complete feeds, and feeding programs to keep Ultra-Lifed Feed Manufacturers leaders in the field.

+ TRAINING

of feed manufacturers employees in livestock and poultry nutrition, feeding programs, on the farm service, and sales techniques.

+ SELLING

aids in many forms, including Your Own Brand Name folders, ad mats, radio copy, feeding and management books, tags, registrations, and your own 16 page monthly Poultry and Livestock Journal.

= THE *Ultra-Life* PROGRAM

Yes, the Ultra-Life Program is a complete program . . . designed to help you build top quality feeds and sell them! Get the facts — write or phone today — let us show you how Ultra-Life works for you.

Ultra-Life LABORATORIES, INC.

Main Office and Plant, East St. Louis, Illinois, USA

One of the Country's Oldest and Largest Manufacturers of Vitamin and Trace-Mineral Products

ROADSIDE EGG VENDOR
Now Available on Time Payments

Here's an Egg Salesman who never sleeps. Yes, with the "T-LINE" EGG VENDOR you can get retail prices for your eggs which means an extra 10c per dozen profit. It's the way to turn your egg venture into a profit maker . . . if you are located on a well traveled highway near town or know of a good spot such as a gas station, large apartment building, parking lot, etc. The "T-LINE" EGG VENDOR is a proven unit. Fully automatic refrigeration and high humidity. Holds 112 dozen eggs in vending position plus refrigerated storage for an additional 120 dozen eggs. Write today for literature and time payment plan to TOBIAS ENTERPRISES, 326 North Michigan Avenue, Chicago 1, Illinois.

CALENDAR FOR 1959-60

JULY

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

AUGUST

S	M	T	W	T	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31					

SEPTEMBER

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

OCTOBER

S	M	T	W	T	F	S
				1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

NOVEMBER

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

DECEMBER

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

JANUARY

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31						

FEBRUARY

S	M	T	W	T	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29					

MARCH

S	M	T	W	T	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

APRIL

S	M	T	W	T	F	S
					1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30

MAY

S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31				

JUNE

S	M	T	W	T	F	S
			1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30		

E. Oliver, 400 Folger Bldg., Washington 5, D.C.

Sept. 15-16—Mutual Millers & Feed Dealers Assn.; Jamestown, N.Y.; sec., Margaret Bentley, 41 Chautauqua Ave., Jamestown, N.Y.

Sept. 15-17—Dixie Poultry Exposition; Asheville, N.C.; sec., N. B. Nicholson, Monroe, N.C.

Sept. 16-18—National Feed Ingredients Assn.; Pick-Congress Hotel, Chicago, Ill.; sec., Peter W. Janss, 212 Equitable Bldg., Des Moines, Iowa.

Sept. 17-18 — Arkansas Formula Feed Conference; University of Arkansas, Fayetteville; chm., Dr. E. L. Stephenson, Department of Animal Industry.

Sept. 18 — College-Feed Industry Conference; Iowa State College, Ames; chm., Prof. Emmit Haynes, Animal Husbandry Dept.

Sept. 23 — Vermont Feed Dealers and Manufacturers Assn.; University of Vermont, Burlington, Vt.; sec., D. C. Henderson, Hills Agricultural Science Building, Burlington, Vt.

Sept. 23-25 — Feed Production School; Continental Hotel, Kansas City; sponsored by Feed Production School, Inc.; pres., Lloyd Larson, 20 W. 9th St. Bldg., Kansas City 5, Mo.

Sept. 26—Small Mill Short Course; Continental Hotel, Kansas City; sponsored by Feed Production School, Inc.; pres., Lloyd Larson, 20 W. 9th St. Bldg., Kansas City 5, Mo.

Sept. 29-30 — Pacific Northwest Garden Supply Trade Show; Masonic Temple, Portland, Ore.; mgr., Russ Hays, 702 Lewis Bldg., Portland, Ore.

Oct. 6-8 — Northeastern Poultry Producers Council Exposition and Convention; Farm Show Building, Harrisburg, Pa.; chm., Alfred Van Wagenen, 10 Rutgers Place, Trenton 8, N.J.

Oct. 7-9—Texas Nutrition Conference; Texas A&M College, College Station; chm., Dr. J. R. Couch, Department of Poultry Science.

Oct. 11-14—Kentucky Poultry Federation and Kentucky Poultry Improvement Assn.; Cumberland Falls State Park, Corbin; sec., John W. Tuttle, 730 Rose St., Lexington, Ky.

Oct. 14 — Animal Nutrition Research Council; Shoreham Hotel, Washington, D.C.; sec., Irwin Olcott, Dawe's Laboratories, Inc., 4800 S. Richmond St., Chicago 32, Ill.

Oct. 14-15—Association of American Feed Control Officials; Shoreham Hotel, Washington, D.C.; sec., Bruce Poundstone, Agricultural Experiment Station Bldg., University of Kentucky, Lexington, Ky.

Oct. 15-16—Michigan Feed & Grain Dealers Assn.; Kellogg Center, Michigan State University, East Lansing, Mich.; sec., Nevels Pearson, P.O. Box 472, East Lansing, Mich.

Oct. 15-16 — West Virginia Feed Dealers Assn. convention; Blackwater Falls Lodge, Davis; sec., J. S. Larrick, Beckley Ice & Feed, Beckley, W. Va.

Oct. 19-20—Beef Research Conference (attendance by invitation); Purdue University, Lafayette, Ind.; sponsored by Agricultural Research Institute and National Academy of Sciences-National Research Council; Dr. C. B. Cox, Agricultural Economics Department, Purdue University.

Oct. 19-20—California Animal Industry Conference; Fresno Memorial Auditorium, Fresno, Cal.; sponsored by California Hay, Grain & Feed Dealers Assn. and University of California; chm., Berton Maxwell, Poultry Producers of Central California, Petaluma.

Oct. 20-21—Virginia State Poultry Federation; Hotel John Marshall, Richmond, Va.; sec., J. Paul Williams, 615 E. Franklin St., Richmond 19, Va.

Oct. 22-23 — Annual Stockholders Meeting, Cooperative G.L.F. Exchange, Inc., Onondago County War Memorial Building, Syracuse, N.Y.

Oct. 22-23 — Iowa Seed Dealers Assn.; Savery Hotel, Des Moines; sec.,

If you use...

COBALT SULPHATE

And want...

Top quality, personalized service, fast delivery

It pays to call on...

BERKSHIRE CHEMICALS, Inc.

630 Third Ave., New York 17, N.Y. Telephone: YUkon 6-8855

The above product is produced by Vitro Rare Metals Company and sold by Berkshire Chemicals, Inc.—both component companies of Vitro Corporation of America.

SALES OFFICES: New York • Chicago • Philadelphia • Cleveland • Boston Pittsburgh • San Francisco

For well-balanced nutritive feeds

MIX

PRODULAC

CORN DISTILLERS SOLUBLES WITH GRAINS

BOTH GRAIN FERMENTATION PRODUCTS

NADRISOL

CORN DISTILLERS DRIED SOLUBLES

These economy fortifiers are rich in proteins, vegetable fats, and highly nutritious. They also contain essential Vitamin B-G Complex factors, as well as unidentified growth factors. Mixing Nadrisol or Produlac in your formula feeds will promote quicker growth, greater meat and egg yield and will produce feeds your customers want to buy. It's a good way to gain and hold customer acceptance.

Sold only to manufacturers of formula feeds.

NATIONAL DISTILLERS PRODUCTS COMPANY

GRAIN PRODUCTS SALES

99 PARK AVENUE, NEW YORK 16, NEW YORK

Faster, More Uniform Lime and Fertilizer Spreading With a

NEW LEADER L-19S SPREADER

- PTO Driven, self-unloading Lime and Fertilizer Spreader!
- Twin Spinners and 24" Conveyor!
- Fast, low cost operation!
- Available with full line of optional attachments!

MAIL TODAY

HIGHWAY EQUIPMENT COMPANY

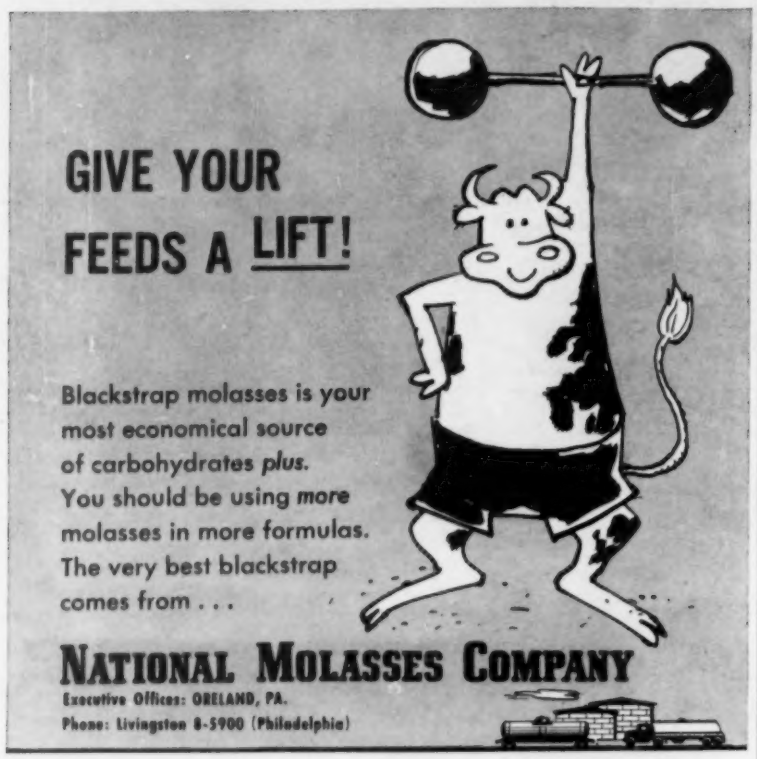
614-8 D Ave. N. W. Cedar Rapids, Iowa

NAME.....

ADDRESS.....

TOWN.....STATE.....

Mail coupon for L-19S literature and a copy of "Your Land Is Different" a booklet designed to help you sell more bulk fertilizer.


GIVE YOUR
FEEDS A LIFT!
Blackstrap molasses is your most economical source of carbohydrates *plus*. You should be using *more* molasses in more formulas. The very best blackstrap comes from . . .
NATIONAL MOLASSES COMPANY
Executive Offices: ORELAND, PA.
Phone: Livingston 8-5900 (Philadelphia)

Your poultry and livestock feeds need

U.S.I. DL-METHIONINE

QUICKLY SOLUBLE AND READILY AVAILABLE UNDER STRESS CONDITIONS

Modern high-energy feeds require the addition of the true amino-acid, U.S.I. DL-Methionine. Pet foods as well as broiler, poultry and certain other livestock feeds are greatly improved by use of this quickly soluble and readily available essential sulfur-containing amino-acid. You get the top-quality, fully active amino-acid from U.S.I., pioneer producer of DL-Methionine.

For service and supply call U.S.I. at the nearest office below

PIONEER PRODUCER OF METHIONINE

Atlanta: 2713 Springdale Road
East Point, Georgia, POplar 6-8039
Baltimore: 200 East Joppa Road, VAlley 5-1141
Boston: 150 Causeway Street, CApital 7-8140
Chicago: 624 S. Michigan Avenue, WAbash 2-1650
Cincinnati: 3317 Glenmore Avenue, MOntana 2-1222
Cleveland: Rockefeller Building, CHerry 1-0073
Detroit: 1448 Wabash Avenue, WOodward 1-4220
Kansas City, Mo.: 903 McGee Street, VIctor 2-2413
Los Angeles: 1901 West 8th Street, DUnkirk 8-1423
Louisville: 7th & Bernheim Lane, MElrose 6-2511
Minneapolis: 2429 University Ave., S. E.,
FEderal 2-7311
New Orleans: 708-9 Maritime Bldg., JAckson 2-0521
New York: 420 Lexington Avenue, OXford 7-0700
Philadelphia: One Bala Ave., Bala Cynwyd, Pa.
MOhawk 4-5110
San Francisco: 220 Montgomery St., EXbrook 7-3250
St. Louis: 1401 Brentwood Blvd., WOodland 1-4400

U.S.I. INDUSTRIAL CHEMICALS CO.
Division of National Distillers and Chemical Corporation
99 Park Avenue, New York 16, N. Y.

Bob Skinner, 928 Des Moines Bldg., Des Moines 9, Iowa.

Oct. 29—Nebraska Feed & Nutrition Conference; University of Nebraska, Lincoln; chm., Dr. John Adams, Poultry Husbandry Department.

Oct. 30—Rooters Day; University of Nebraska, Lincoln; Dr. E. R. Peo, Animal Husbandry Department.

Oct. 30 — Illinois Sheep Producers Day; University of Illinois, Urbana; chm., Dr. U. S. Garrigus, Department of Animal Science.

Nov. 4-5—Illinois Feed Assn. and Illinois Poultry Improvement Assn., joint convention; Armory, Springfield, Ill.; IFA, Leland Hotel; sec., Dean M. Clark, Board of Trade Bldg., Chicago; IPIA, St. Nicholas Hotel; sec., Aubrey Harless, Box 91, Shelbyville, Ill.

Nov. 4-7 — National Renderers Assn., Hollywood Beach Hotel, Hollywood Beach, Fla.; sec., Miss Jamie Fox, 30 N. La Salle St., Chicago 2, Illinois.

Nov. 6-7—Oklahoma Formula Feed Conference; Oklahoma State University, Stillwater; chm., Dr. Rollin H. Thayer, Poultry Science Department.

Nov. 12-13—Cornell Nutrition Conference; Hotel Statler, Buffalo, N.Y.; chm., Dr. F. W. Hill, Poultry Husbandry Dept., Cornell University, Ithaca, N.Y.

Nov. 19-20—National Swine Industry Conference; Iowa State College, Ames; chm., Keith Myers, National Swine Growers Council, Grundy Center, Iowa.

Nov. 22-24—Western Grain & Feed Assn. of Iowa; Fort Des Moines Hotel, Des Moines, Iowa; sec., Bob Skinner, 928 Des Moines Bldg., Des Moines 9, Iowa.

Nov. 27-28 — American Society of Animal Production; Sherman Hotel, Chicago, Ill.; sec., Dr. H. H. Stonaker, Colorado State University, Ft. Collins, Colo.

Nov. 30-Dec. 1 — Midwest Veterinary Nutrition Conference; President Hotel, Kansas City; sec., Lloyd Larson, Midwest Feed Manufacturers Assn., 20 W. 9th Street Bldg., Kansas City 5, Mo.

Dec. 8-9 — Poultrymen's Service Clinic; Cornell University, Ithaca, N.Y.

1960

Jan. 4-5 — Kansas Formula Feed Conference; Kansas State University, Manhattan, Kansas.

Jan. 17-19—Indiana Grain & Feed Dealers Assn.; Claypool Hotel, Indianapolis, Ind.; sec., Fred K. Sale, 600 Board of Trade Building, Indianapolis 4, Ind.

Jan. 25-27 — Southeastern Poultry & Egg Assn.; Municipal Auditorium, Atlanta, Ga.; sec., Harold E. Ford, 235 E. Ponce de Leon Ave., Decatur, Ga.

Feb. 4-5—Oregon Animal Industry Conference; Oregon State College, Corvallis, Ore.; chm., Dr. J. E. Parker, Poultry Husbandry Department.

Feb. 8-9—Montana Nutrition Conference; Montana State College, Bozeman; chm., Dr. O. O. Thomas, Animal Industry Dept.

Feb. 8-9—Midwest Feed Manufacturers Assn.; Muehlebach Hotel, Kansas City; exec. vice pres., Lloyd Larson, 20 W. 9th St. Bldg., Kansas City 5, Mo.

Feb. 11 — Boston Grain and Flour Exchange Annual Banquet; Sheraton-Plaza Hotel, Boston; chm., Paul Sutliff, 177 Milk St., Boston, Mass.

Feb. 12-14—Fact Finding Conference, sponsored by the Institute of American Poultry Industries; Municipal Auditorium, Kansas City, Mo.; pres., Harold M. Williams, 59 East Madison, Chicago, Ill.

Feb. 21-23 — Ohio Grain & Feed Dealers Assn.; Commodore Perry Hotel, Toledo; sec., G. E. O'Brien, 694 N. Ohio Street, Greenville, Ohio.

Feb. 22-23—Virginia Feed & Nutrition Conference; Hotel Roanoke, Roanoke; J. Paul Williams, sec., Virginia State Feed Assn., 615 E. Franklin St., Richmond, Va., or Prof. Paul M. Reaves, Department of Dairy Science, Virginia Polytechnic Institute, Blacksburg, Va.

March 7-8—Grain & Feed Dealers National Assn.; Hotel Muehlebach, Kansas City; sec., Herbert L. Sharp, 400 Folger Bldg., Washington 5, D.C.

March 17-18—Oregon Feed & Seed Dealers Assn.; New Sheraton Hotel, Portland, Ore.; mgr., Russ Hays, 702 Lewis Bldg., Portland, Ore.

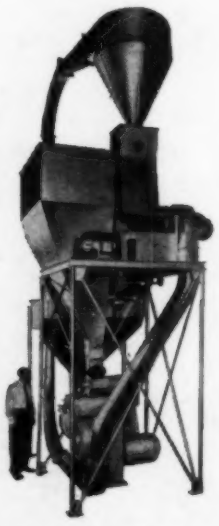
March 23—Distillers Feed Conference; Sheraton Gibson Hotel, Cincinnati; sponsored by Distillers Feed Research Council; exec. director, Dr. Lawrence E. Carpenter, 1232 Enquirer Bldg., Cincinnati, Ohio.

April 21-23—California Hay, Grain & Feed Dealers Assn., Ambassador Hotel, Los Angeles; sec., John Gilmore, Blue Anchor Bldg., 1400 10th St., Sacramento 14, Cal.

April 21-23—Kansas Grain & Feed Dealers Association; Broadview Hotel, Wichita, Kansas; sec., Orris E. Case, 609 Wiley Bldg., Hutchinson, Kansas.

May 9-11—American Feed Manufacturers Assn.; Conrad Hilton Hotel, Chicago; sec., W. T. Diamond, 53 W. Jackson Blvd., Chicago 4, Ill.

Check the CPM
"MASTER" PELLET PLANT



. . . a compact, complete and efficient packaged pelleting plant you can install yourself. Produces quality, thoroughly cooled and screened pellets or crumbles.

This is just one of California's complete line of pellet mills. Other models with capacities from 1 to 15 tons per hour. Write for complete information, or ask for your CPM representative to call.

CPM CALIFORNIA PELLET MILLS
CALIFORNIA PELLET MILL COMPANY
1800 Folsom St., San Francisco 3, California
1114 E. Wabash Ave., Crawfordsville, Indiana
101 E. 15th Ave., North Kansas City 16, Missouri

Sales & Service Representatives also in: Albany · Birmingham · Columbus · Davenport
Denver · Fort Worth · Los Angeles · Mexico City · Minneapolis · Oklahoma City · Omaha
Richmond · Seattle · St. Louis · Toronto · Winnipeg
Also manufactured, sold and serviced by Henry Simon Ltd., Stockport, England.

chicks to crates ...Faster!

using Seagram Solubles with *GFF

Baby Chicks grow faster, healthier, bigger and reach market finish quicker when their rations are balanced with nutritious Seagram Solubles. This dynamic feed supplement is naturally rich in vital protein, minerals and B-vitamins plus GFF — grain fermentation factors. A little Seagram Solubles goes a long way . . . you feed less but more efficiently and more economically. Improve the power of your feeds by balancing them with Seagram Solubles.

*GRAIN FERMENTATION FACTORS — *unknown growth factors*

JOSEPH E. SEAGRAM & SONS, INC.
Grain Products Division
375 Park Avenue
New York 22, N.Y.

Member Distillers Feed Research Council

Seagram SERVICE TO AGRICULTURE

Carcass Grades On Stilbestrol Cattle Above Live Grades

AMES, IOWA — Federal carcass grades of 80 stilbestrol-fed experimental cattle sold recently at the John Morrell & Co., Ottumwa, packing plant, averaged one-third to two-thirds of a grade higher than the on-the-hoof grades that had been estimated for these cattle by a committee of representative packer and market buyers.

Eugene Summers and Wise Burroughs, animal husbandmen of Iowa State College, said this appeared significant because some cattle handlers have believed there is a tendency for buyers to grade stilbestrol-fed cattle too high on the hoof.

Dr. Burroughs said the cattle in this shipment were shown at the annual cattle feeders' day last March on tests comparing linseed meal with a combination of urea and linseed meal in cattle supplements and checking effects of tranquilizers on cattle gains. They were sold on live-weight grade estimated by a committee of cattle buyers representing Iowa packing firms and the Sioux City livestock market.

Experimental Tests

The experimental tests with the supplements and tranquilizers showed no significant differences that could be attributed to the differences in supplements or tranquilizer additives. However, Dr. Burroughs and Mr. Summers said, the fact that all the cattle received 10 milligrams of stilbestrol daily and that they averaged ½ or ⅝ higher in carcass grade than they did on the hoof was important.

Dr. Burroughs said most of the college results in the past have indicated, on the average, that stilbestrol feeding does not affect carcass quality, either favorably or unfavorably.

Mr. Summers, serving with the college's cooperative extension service, said the better appearance of the dressed beef "on the rail" at the packing house as compared to the grade the buyers' committee estimated for the same beef "on the hoof" may point up a principle of feeding that may prove helpful.

Stilbestrol, he pointed out, is a feed additive that stimulates the natural feed utilization processes so that the animal's feed efficiency and rate of gain are improved about 20%. However, Mr. Summers said, it still takes as much energy feed—this means corn in the Midwest feeding programs—to produce a top quality finish on a steer. If a farmer had to feed a steer 3,000 lb. of corn to finish him at high-choice grade before he knew about stilbestrol, he should plan to use about that much corn to bring the same kind of steer to the same grade with a ration including stilbestrol, he said.

The difference, with stilbestrol, is that the choice steer will be a bigger animal, when he reaches that grade, Mr. Summers pointed out. Some cattlemen, he said, have been making the mistake of expecting top finish when they market their stilbestrol-fed cattle when they reach a satisfactory market weight. When the price difference for top-grading cattle is "right", it may pay to keep on feeding to get finish as well as more weight, Mr. Summers said.

The cattle in the shipment to the Morrell plant included 12 lots of cattle totaling 71 head that started on feed at an average weight of about 750 lb. and finished at an average weight of about 1,250 lb. per head after 210 days on feed. They ate an average of 57 bu. of corn per head during the feeding period. Nine other cattle in this shipment had been fed 142 days.

NEW CHARGE SERVICE

VALDOSTA, GA. — Several feed and seed stores have joined in a new charge service instituted through the Citizens and Southern National Bank here. In this service, the customer has a charge card and pays the monthly bill in one check. Among the participating stores are Valdosta Feed Mills, Inc., Walker's Seed and Supply Co., Parramore & Griffin Seed Co., and McDonald Nurseries.

Sturtevant Forms Grain Processing Division

DORCHESTER, MASS. — Sturtevant Mill Co., Dorchester, has announced the formation of a grain processing division. The new division will concentrate primarily on flour milling and associated industries—wheat, rye, corn, barley, soybean and rice.

Manager of the division will be Austin T. Drake, formerly eastern supervisor of technical sales for Entoleter division of Safety Industries. He has spent 25 years in the flour milling and associated industries, and is an active member of the Association of Operative Millers.

The company recently announced it had developed a new impact pulverizer, the Pulver-Mill, designed primarily for the fine grinding of soft materials.

Specifide Appoints Research Director

INDIANAPOLIS — Dr. William H. Feigh has been appointed director of research for Specifide, Inc., Indianapolis, announced John O. Beasley, president of the firm.

Dr. William Feigh

Dr. Feigh is a graduate of the College of Veterinary Medicine at Ohio State University. Before entering the veterinary school, he majored in animal science. At Ohio State he became a member of several agricultural honor societies, and was editor of the veterinary school publication.

WHICH IS THE CARB-O-SEP PEN?

Patent Pending

This pen received Product A—one of the prominent commercial products available for preventing blackhead.
Results at the end of the test period
Mortality due to blackhead 40% % severe liver lesions 45%
% severe cecal lesions 55% Feed conversion 3.29

This pen received Product B—another of the prominent commercial products available for preventing blackhead.
Results at the end of the test period
Mortality due to blackhead 15% % severe liver lesions 15%
% severe cecal lesions 20% Feed conversion 2.88

This Control Pen received no blackhead preventive product
Results at the end of the test period
Mortality due to blackhead 60% % severe liver lesions 60%
% severe cecal lesions 60% Feed conversion 4.16

This pen received CARB-O-SEP.
Results at the end of the test period
Mortality due to blackhead 0 % severe liver lesions 0
% severe cecal lesions 0 Feed conversion 2.35

—Abstracted From Test C-158

CARB-O-SEP AGAIN PROVES ITS SUPERIOR BLACKHEAD PROTECTION

The birds in each of the above pens are the same age—15 weeks. The same number of birds were started in each pen. They were raised under exactly identical conditions—except for the blackhead preventive used. The pictures and the statistical results convincingly prove the superior efficacy of CARB-O-SEP.

And, in regular commercial use, too, during the tough blackhead season of 1958, CARB-O-SEP-protected birds came through in fine shape . . . without increasing the dosage level over the original recommendations. As one big Virginia grower put it, "We didn't know what blackhead was this year."

. . . get your free copy. Latest information on health control, management and marketing.

PUT "PROVEN BLACKHEAD PROTECTION" IN YOUR TURKEY MASH

For more information, write Dept FS-7

Whitmoyer LABORATORIES, INC.
MYERSTOWN
PENNA., U.S.A.

IN CANADA—WHITMOYER LABORATORIES, LTD., PORT CREDIT (TORONTO TWP.), ONTARIO

SEND FOR THE NEW ELTON CONVEYOR CATALOG
It will save money for you!
CHANTLAND MFG. CO.
Humboldt, Iowa

FARMERS FRIEND MINERAL FEED
WRITE FOR DELIVERED PRICES
FARMERS FRIEND MINERAL CO.
NAPOLEON, OHIO

"Purina Research has helped me help farmers," says Mr. Harvey.

"Service to farmers is the keystone of our Purina business growth"

—says Ed Harvey, of Ed Harvey Farm Supply, Princeton, Indiana

When Ed Harvey had the Checkerboard sign painted on his store five years ago, he was determined that it would identify a Super Service Center. His business has grown every year because his organization's service has helped add many thousands of dollars to the community's income.

Through Ed Harvey service, the grain and livestock farmers around Princeton learned about caged hens for egg production. Now, more than 12,000 cages are adding to farm income. The Service Center markets some of the eggs and has found markets for others.

Nearly twoscore barns have been converted to "Pig Parlors," following the modern Purina Way of producing better pork at lower cost.

The Super Service Center in Princeton helps folks get the right kind of buildings, helps get financing when needed, helps farmers get more from what they have and with less work.

Because of such service, Ed Harvey Farm Supply has grown to one of Princeton's most important businesses.

Don Lynch and Ed Harvey travelled to another state to see how to build a pit to handle liquid fertilizer from the "Pig Parlor." The pit now has been finished.

Check-R-Mix service, provided by Ed Harvey, helps Farmer John Stewart get top results with his registered Hampshire hogs.

Ed Harvey works with J. A. McCoy, of White Lumber Company, to provide farm folks with economical, modern farm buildings.

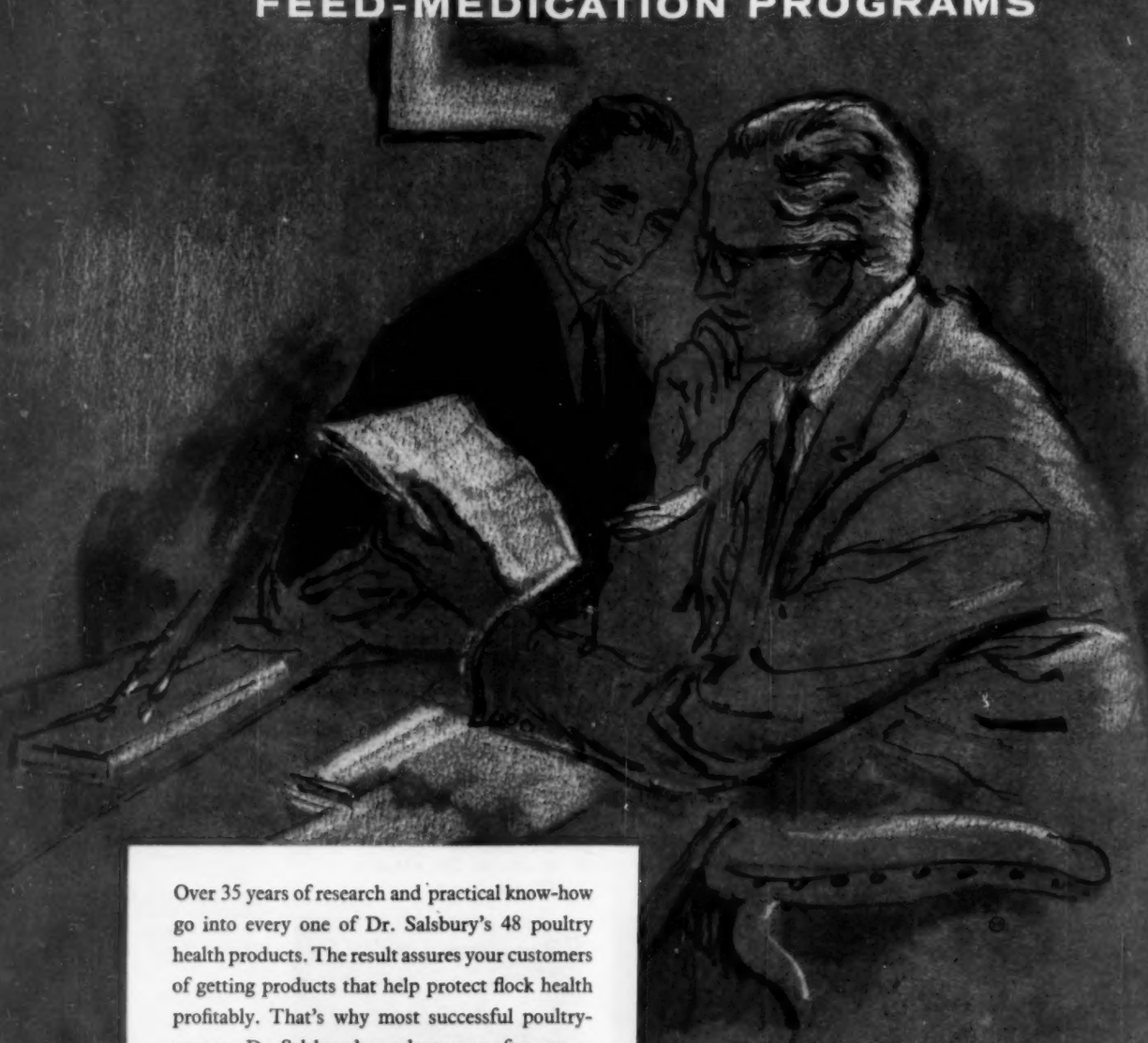
Harvey's outside salesman, Ed Whitten, organized Hog Clubs which meet regularly to exchange ideas and to hear the latest feeding and management facts.

PURINA...YOUR PARTNER IN SERVING ANIMAL AGRICULTURE

Dr. Salsbury's Laboratories—
The Scientific Approach to Poultry Health Problems

at your SERVICE... with SCIENCE-developed

FEED-MEDICATION PROGRAMS



Over 35 years of research and practical know-how go into every one of Dr. Salsbury's 48 poultry health products. The result assures your customers of getting products that help protect flock health profitably. That's why most successful poultrymen use Dr. Salsbury's products year after year—they know they can depend on this time-tested, scientific approach to poultry health problems.

However, proper medication is only one part of good flock management. For best results, growers should practice sound feeding, housing, sanitation and pest control.

Dr. Salsbury's Field and Laboratory Services Make Your Feeds More Salable...

The feed industry looks to Dr. Salsbury's for additives that protect health and promote efficient poultry production. But—more than for products alone—we are known for SERVICE.

SERVICE IN THE FIELD

Every one of Dr. Salsbury's 73 field service representatives (Territory Managers) has the training and experience to provide the advice you often need on poultry disease and medication.* He keeps informed on industry problems—so let the Dr. Salsbury man show you how scientific feed-medication programs can gain for you greater customer acceptance and satisfaction.

**When difficult problems arise, Dr. Salsbury's regular field service representative may call on a corps of Technical Service Advisers from the Laboratories.*

IMPROVE YOUR OWN FIELD SERVICE

specialized training available to your staff

Dr. Salsbury's offers short courses that provide practical training in poultry disease and methods of prevention and control. Over 10,000 students from the poultry and feed industries have benefited from this training. Inquire about training for your service personnel.

SERVICE AT THE LABORATORIES

Behind our nationwide service stands science—science that specializes in poultry health. Our staff of research specialists are keenly aware of the need for feed-medication programs that work in the field. Therefore, whenever research develops a product, practical procedures are a must—to make it successful for use in the feed industry.

In the interest of the entire poultry industry, Dr. Salsbury's Laboratories is running a full-page ad (shown at right) in the July 6 issue of LIFE magazine. It will tell millions of Americans why the chicken they eat is better than ever before. It also credits developments in feeds and nutrition with contributing to today's better broilers. This type of advertising is typical of Dr. Salsbury's service to the feed and poultry industries.

At Dr. Salsbury's, science and service go hand-in-hand to provide you with superior feed additives that work in the field. Write, wire, or phone for quick, expert advisory service on poultry disease and medication.

Dr. SALSBURY'S LABORATORIES
Charles City Iowa

NATIONWIDE SERVICE TO THE FEED INDUSTRY

SUNSET FEED & GRAIN CO., INC.

PHONE CLEV. 2938 — 805 Dun Building, Buffalo 2, N.Y. — TWX BU 71

FEED JOBBERS
AND
DISTRIBUTORS OF

KELLOGG HOMINY FEED
HUBINGER GLUTEN FEED
DYNAFOS DICALCIUM PHOSPHATE AND MULTIFOS
SODIUM BENTONITE
PACIFIC MOLASSES
PILOT OYSTER SHELLS
DU PONT'S "TWO-SIXTY-TWO" FEED COMPOUND
STONEMO GRANITE GRIT
CALF MANNA
NOPCO FEED SUPPLEMENTS
PROTAMONE
STIMULAC
PILOT SECOND CLEAR FLOUR

INQUIRIES APPRECIATED

Becomes Member of Eastern Exchange

WEST SPRINGFIELD, MASS. — James L. Duffman, West Springfield, became a member of the feed distribution department staff of Eastern States Farmers Exchange.

Mr. Duffman began employment with Eastern States in 1952 as an assistant in the Collegeville, Pa., service center. In 1953 he moved to the West Springfield headquarters office where he worked as a service center auditor. The first of this year he was transferred to the production division at the Eastern States Buffalo, N.Y., feed mill for further training prior to this new assignment.

OPEN HOUSE HELD

RIPON, WIS. — Myron Grimm Feeds held a first anniversary open house for feeders and dealers recently. Mr. Grimm serves feeders in the Ripon area and also operates a warehouse for Staley Feeds.

T. C. Veblen Named to New Post with Cargill

MINNEAPOLIS — Thomas C. Veblen, vegetable oil merchant in the Ft. Dodge, Iowa, office of Cargill, Inc., Minneapolis, has been named account manager in charge of merchandising activities at the firm's new soybean processing plant which will be completed this fall at Norfolk, Va.

Thomas C. Veblen

Fred M. Seed, vice president of Cargill's vegetable oil division, said Mr. Veblen will control and coordinate soybean purchases for the plant, working through the firm's present buying organization, and will supervise area sales of meal to feed manufacturers and livestock producers.

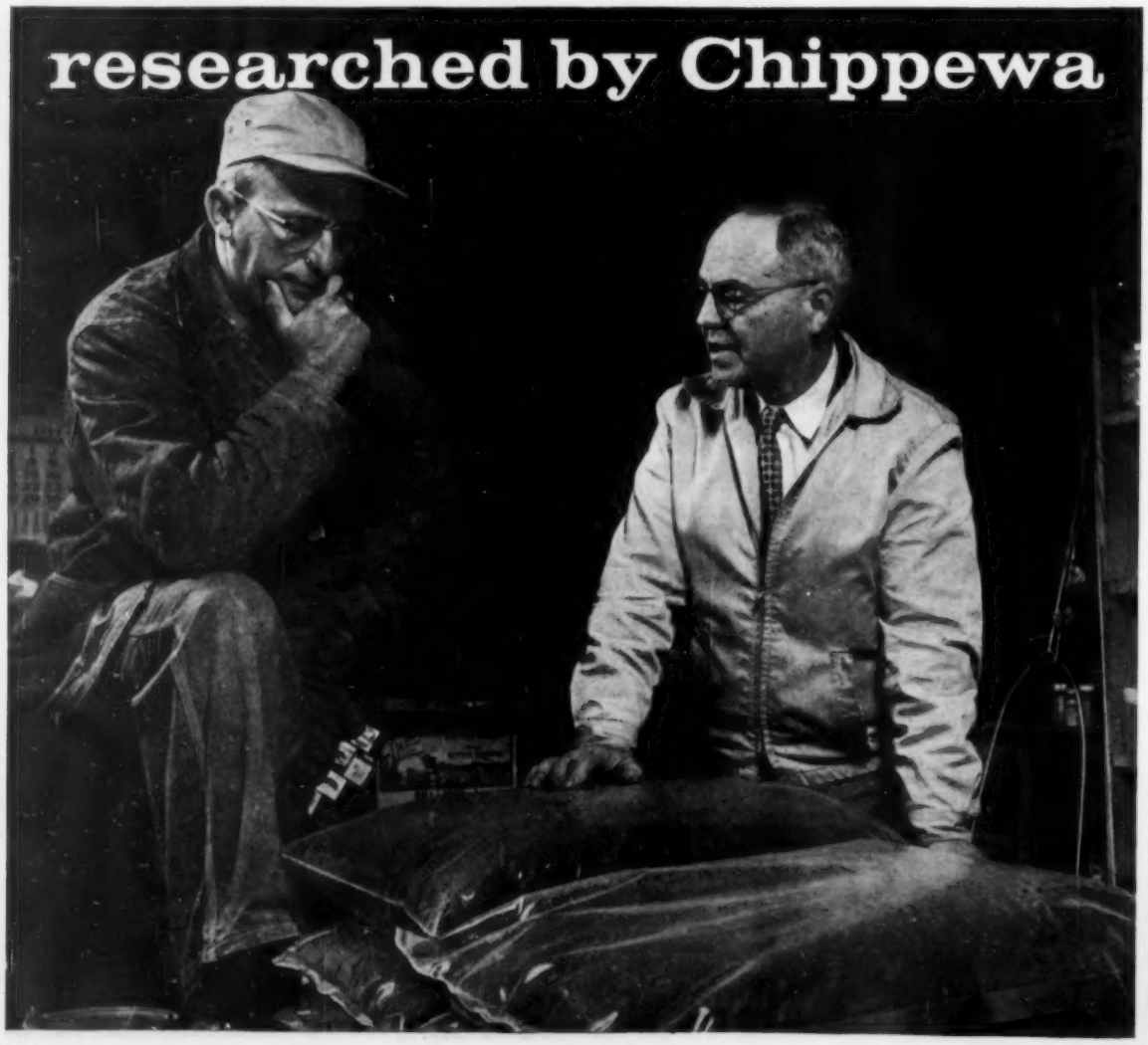
Mr. Veblen joined Cargill in 1955, and transferred from Minneapolis to Ft. Dodge in 1956. He is a graduate of California State Polytechnic with a degree in business administration and field crops, and also holds a master's degree in farm crops from Oregon State College.

NOW..show a man the feed he's buying with new heavy duty polyethylene packaging!

Chippewa's new transparent bag developed for fertilizer packaging is a big boon to feed store men because it lets them show customers what they're buying . . . and the bag can be printed in four colors for real display value! The heavy duty, 100% polyethylene bag offers the equal advantages of being moisture proof and insect proof: feed can even be stored out of doors, in any kind of weather! Palletizing is no problem, and breakage in shipment and handling has proved to be less than ¼ of 1%. This bag, with its many outstanding characteristics, is one of many new products from Chippewa Plastics, the leader in polyethylene film research, technical know-how, and the development of specialized equipment for quality-controlled mass production. Chippewa engineers will work with you in testing and incorporating this new bag in your production lines. For further information, contact:

Department of Feed Packaging
CHIPPEWA PLASTICS CO.
Division of Rexall Drug and Chemical Company
Chippewa Falls, Wisconsin

The mark of leadership



Changes Noted for Story on Urea Tests

Dr. O. H. Horton, associate professor, department of animal industry and veterinary science, University of Arkansas, recently informed Feedstuffs that certain changes in a story from the University on supplementing low quality roughages with a liquid urea preparation for dairy heifers are necessary "to clear up some misunderstandings."

The story, from information which appeared in Arkansas Farm Research, appeared in the June 13 issue of Feedstuffs on page 84.

One of the paragraphs, he said, should have read: "In one of the cottonseed hull rations a supplement of 1 lb. of corn and 3 lb. of liquid feed was fed. In a second ration cottonseed hulls were supplemented with 1 lb. of corn and 2 lb. of cottonseed meal. The two groups of animals on cottonseed hulls gained almost the same amount, but neither group gained as well as the control receiving grass hay and 2 lb. of corn."

A sentence, in the original story, which he said should be omitted is: "Thus, 3 lb. of the liquid mixture was about equal to 1 lb. of cottonseed meal."

Results of the studies, on which the story was based, indicate that the urea-in-molasses preparation can be used as a protein supplement in larger amounts than one third of the total protein equivalent.

Cereal Products Plant

WALKERVILLE, ONT. — The cereal products department of the Hiram Walker & Sons, Ltd., Canadian Club distillery is being expanded here at a cost of $600,000. The cereal products recovery plant produces distillers dried grains with solubles and distillers solubles marketed by Hiram Walker under the name of Stimuflav.

New evaporator and drying equipment is being installed in the present cereal products building which will be devoted entirely to production of distillers dried grains.

From the approximately 10 bu. of grain used to produce a barrel of whisky, about 200 lb. of grain residue, enriched by distillers yeast, is recovered.

SPECIFY
Columbia Calcium
COLUMBIA QUARRY CO.
1007 Washington Ave.
ST. LOUIS 1, MO.

Associate Director Of CSS Grain Division

WASHINGTON—Louis N. Roberts, Mitchell, Ind., has been appointed associate director of the grain division in the U.S. Department of Agriculture's Commodity Stabilization Service.

Mr. Roberts was born in Mitchell, Ind., in 1911. For many years, he farmed near Mitchell with his father. Since 1937, he has had a partnership with his brother in the 1,250-acre family farm raising livestock, grain and hybrid seed corn. Mr. Roberts has been county chairman of the Lawrence County Farm Bureau, county chairman of the Lawrence County Artificial Breeders Assn., and county director of the East Fork of White River Soil and Water Conservation District.

The operation of the CSS grain division includes price support programs on grains and oilseeds, allotment and quota programs on grains, procurement and sales of grains, International Wheat Agreement and storage of government-owned grains.

Poultry Firm Contests Tax Ruling in Georgia

GAINESVILLE, GA.—J. D. Jewell, Inc., poultry firm here, has instituted a test suit against collecting Georgia sales tax on sales to federal installations.

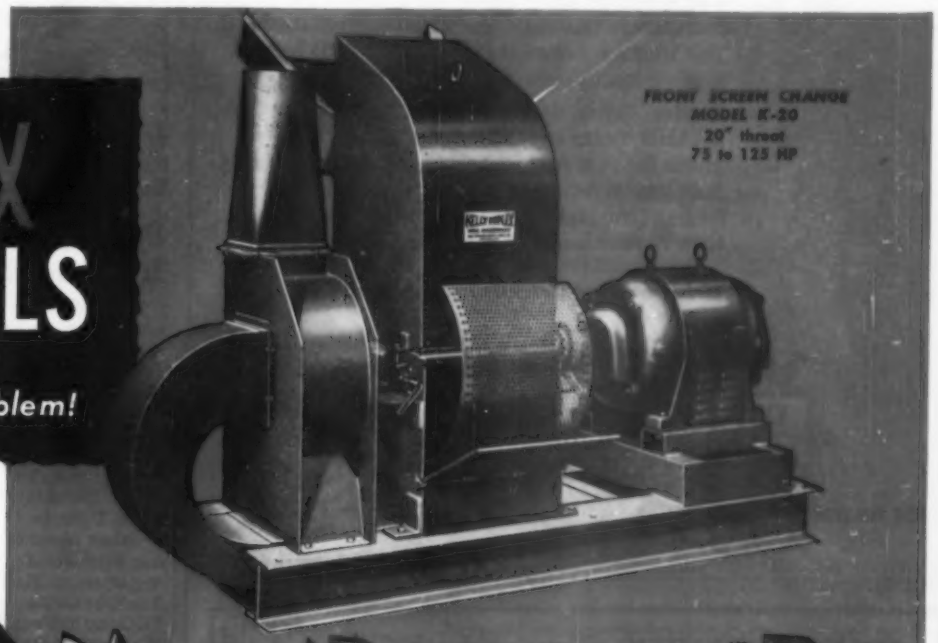
The company has challenged a ruling by George Cook, attorney general of Georgia, that the state's 3% sales tax is a levy on seller rather than on purchasers and consumers.

The firm contends the 1951 sales tax act does not impose a tax on dealers with respect to sales to the federal government. Refund of $199.56 in sales taxes on poultry products sold to Ft. Benning was asked by the firm.

BLACKSTRAP MOLASSES
ANIMAL FEED SUGAR
Olavarria & Co., Inc.
79 Pine Street
New York 5, New York
MOLASSES TERMINALS
New Orleans, La.
Paulsboro, N.J.
TELEPHONE:
WHitehall 3-6930
TWX: NY 1-4409

AMERICAN ELEVATOR & GRAIN DIVISION
Russell-Miller Milling Co.
P.O. Box 157, Buffalo, N. Y., Phone MAdison 6007, Teletype BU 550
SHIPPERS CARLOAD LOTS—CHOICE WHEAT, CORN, OATS, BARLEY
TERMINAL ELEVATORS AT
BUFFALO — New York — DULUTH — Minnesota — MINNEAPOLIS — Minnesota

KELLY DUPLEX
HAMMERMILLS
A complete line... to handle any grinding problem!



Whatever you may be looking for in a hammermill...you'll find the answer to your problem in the Kelly Duplex line.

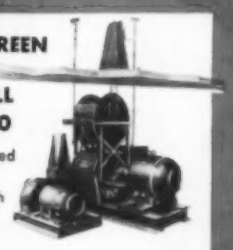
There's a size, a type and a capacity to meet every need. Each machine is ruggedly constructed of extra heavy arc welded steel to assure low maintenance costs and long life . . . each gives you unsurpassed grinding efficiency and quick, easy screen change . . . and each is unconditionally guaranteed to grind more grain with the same power, conditions being equal, than any other hammermill on the market—or your money back.

We'll be glad to show you, through our free planning and layout service, how one of these machines can be "custom built" to give you maximum production at minimum cost. Mail the card today for literature and full details.

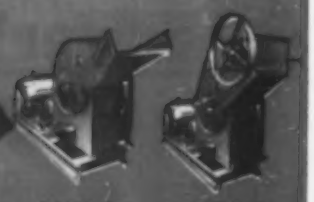
FRONT SCREEN CHANGE MODELS

MODEL KT — 12" throat — 30 to 50 HP
MODEL M — 16" throat — 40 to 75 HP
MODEL M-10 — 16" throat — 75 to 100 HP
MODEL S — 24" throat — 75 to 125 HP

REMOTE SCREEN CHANGE HAMMERMILL MODEL D-20
20" throat. Furnished with motor on blower—and with either one or two motors on mill.



SIDE SCREEN CHANGE MODELS

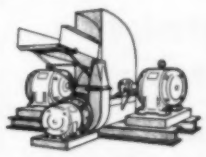


MODEL LT — 12" throat — 30 to 50 HP
MODEL L — 12" throat — 30 to 50 HP

MULTI-MOTOR hammermills

All Kelly Duplex Hammermill models can also be furnished as either two-motor mills (one on blower and one on mill) or as three-motor mills (one on blower and two on mill).

These multi-motor hammermills let you regulate HP consumption to the job at hand, give you balanced power and "direct line" processing, reduce starting power requirements, and virtually eliminate downtime.



CLIP ALONG THIS LINE . . . FOLD OVER, FASTEN . . . AND MAIL TODAY!

FIRST CLASS
Permit No. 72
SPRINGFIELD, OHIO

VIA AIR MAIL

BUSINESS REPLY ENVELOPE
No postage necessary if mailed in the United States

—POSTAGE WILL BE PAID BY—

The Duplex Mill and Manufacturing Company
Springfield, Ohio

FOLD OVER ON THIS LINE . . . FASTEN (STAPLE, GLUE, TAPE)

The Duplex Mill & Mfg. Co.
Springfield, Ohio

Yes, I'm interested in KELLY DUPLEX machinery. Without obligation, please send me complete information on the items checked.

☐ Information on free mill planning and layout service.

☐ Hammermills
☐ Vertical Feed Mixer
☐ Vertical Screw Elevator
☐ Portable Screw Elevator
☐ Bucket Elevator
☐ Twin Molasses Mixer
☐ Chain Drag
☐ Pit Auger
☐ Electric Truck Hoist
☐ Corn Crusher-Regulator
☐ Corn Sheller with Blowers
☐ Regular Corn Sheller
☐ Pitless Corn Sheller
☐ Combined Sheller-Cleaner
☐ Gyrating Cleaner
☐ Corn Scalper
☐ Corn Cutter and Grader
☐ Cob Crusher
☐ Electric Bag Cleaner
☐ Forced Air Carloader
☐ Magnetic Separator
☐ Grain Feeder
☐ Grain Blower
☐ Complete Line Catalog

NAME _____
TITLE _____
FIRM _____ PHONE _____
CITY _____ STATE _____

Best for you

PILOT BRAND
OYSTER SHELL

Through the years, PILOT BRAND Oyster Shell has been first choice with poultry raisers everywhere. That's because PILOT BRAND is almost 100 per cent calcium carbonate, the perfect eggshell material. Test after test proves that PILOT BRAND helps produce more eggs with stronger shells.

The big, day-in, day-out demand for PILOT BRAND means steady sales, fast turnovers, good profits for you. And we help keep customers coming your way with consistent national advertising in leading farm and poultry journals and on more than 70 prominent radio stations.

Order from your distributor . . . or write to us.

PILOT BRAND OYSTER SHELL FOR POULTRY

Oyster Shell Products Company
Mobile, Alabama

FEEDSTUFFS—*LEADER in its field*

More advertisers use FEEDSTUFFS than any other publication in the feed industry

SELLIN' SAM — By Jim Zilverberg

"A fella's bound to make a few friends when he's been in the feed business thirty years like I have!"

Poultry Clinic Planned In Georgia July 16-17

RICHMOND, VA.—The Southeastern Poultry & Egg Assn.'s second annual broiler sales clinic is to be held July 16-17 at the University of Georgia's center for continuing education, according to Harold Ford, executive secretary of the association.

"Sunshine Gene" Flack, sales counsel and director of advertising, Sunshine Biscuits, Inc., will speak on "The Time Is Now."

Other speakers and their subjects are Kenneth D. Naden, National Association of Food Chains, on "Retail Merchandising Practices"; Robert McGowan, Fort Halifax Packing Co., Waterville, Maine, on "Distribution"; Ray Clymer, Dennison Poultry Co., Longview, Texas, on "Selling With Union Opposition," and Gordon Sawyer, National Broiler Council, on "Case Study on Sales."

Also, Dr. J. Clyde Driggers, University of Georgia, will speak on "Egocentric Predicament"; Dr. William Harris, University of Georgia, on "Brainstorming Your Sales Problems," and Lee Campbell, Institute of American Poultry Industries, on "International Sales Potentials," and "A Buyer Tells How He Would Sell Broilers."

Last year's Clinic attracted more than 25 salesmen in the poultry field from five southeastern states and an even bigger attendance is expected this year, Mr. Ford said.

Fee for the Clinic is $50 for members of the association and $75 for non-members, which includes tuition, books and supplies.

Persons interested in attending the Clinic should contact Southeastern's Decatur, Ga., office at 235 E. Ponce de Leon Ave.

Central Soya Grain Buyer Retires

INDIANAPOLIS, IND. — William G. "Bill" Haug, soybean and grain buyer for Central Soya Co. at its Indianapolis board of trade office, has retired, bringing to a close a grain business career that began half a century ago. Mr. Haug entered the grain business as a buyer for a Louisville, Ky., wholesale grain house in 1909.

W. G. Haug

In 1942, he became plant manager for Central Soya's plant at Camp Hill, Pa., a position that he held until 1955, when he was transferred to Indianapolis as a soybean and grain buyer for the company.

Wenger's — NEW BULK UNLOADER FOR { *Flat Bed Trucks—Economical* / *Mill to Farm Deliveries.*

Handle both bagged and bulk feeds, (mash, pellets, crumbles, etc.) and whole grains in a single flat bed truck. Horizontal unloader recessed in floor of truck. Vertical boom is 7 feet high (extra height optional). 14 ft. unloading boom will rotate 360 degrees and may be elevated to 18 ft. above ground level with hydraulic hand pump furnished with unit. Entire unit is power driven from power take off. May be installed in your own shop.

Write for information giving dimensions and make of your truck bodies.

Wenger Mixer Mfg. Co.
SABETHA, KANSAS · PHONE 111

Standard of the Industry for Liquid Feed Mixing, Pelleting and Cooling Equipment.

MILBREW CO.
BREWERS' DRIED YEAST
PROCESSORS SINCE 1933
3456 N. BUFFUM ST.
MILWAUKEE 12, WIS.
PHONE ED. 2-3114

SWISHER

the only Feed Service Plan Built to MEET TODAY'S CHALLENGE!

The *revolution* in agriculture has brought on a drastic *evolution* for you in the feed business! Today you must supply a feed and feeding program that takes into account mechanized livestock raising and the growth of big, *commercial* producers who want *feed* at the LOWEST POSSIBLE COST! The *only* way to do this is to utilize the SWISHER Feed Service Plan which has "built-in" money-saving features that do not sacrifice feeding efficiency but enhance it!

The SWISHER Program does this by making you a big-time MANUFACTURER of feeds. YOU have *every* advantage that they have.

Here are your benefits that make Swisher Feed Service the "Modern Approach" in Feed Merchandising!

FACT #1 — The SWISHER plan supplies all the micro-nutrients, vitamins, minerals, animal proteins and unidentified factor sources *in one package*. You add the grain and soybean meal locally.

FACT #2 — The SWISHER method of *manufacturing* your own feed saves tremendous costs in transportation, mark-up and handling charges while keeping the manufacturing process *simple* and *easy*. You can make a *far* GREATER PROFIT for every dollar of feed sold because you are making these additional mark-ups!

FACT #3 — You are in a better competitive position — thus you SELL MORE FEEDS! Why? Because you are selling feeds direct at less cost than your competitors to farmer-feeders who today *demand lowest possible cost!*

FACT #4 — You are selling a FIRST LINE OF FEEDS, the very best feeds possible as developed by research, by laboratory control, and by thousands of users, many of whom are big commercial producers who insist on and obtain the "least cost" of production.

FACT #5 — SWISHER supplies you all the formulas for COMPLETE feeding programs (an absolute *must* today), a prestige brand name, bags, registration, advertising, personal sales assistance — all the ingredients you need to build *tremendous* sales volume!

Testimony from a SWISHER MILL OWNER

Here's what Bill Shirley of Durham and Shirley, Inc., at Lebanon, Indiana, says:

"The local manufacture of Swisher Feeds under the Swisher Feed Service franchise is simple and easy. For the mill operator who is looking to the future, this is the program that will keep him in business and ahead of his competition. With Swisher Feeds which we manufacture, we are able to undersell competitive brands and still make considerably more gross profit. Furthermore, we have better customer satisfaction because Swisher Feeds are giving our customers the *lowest costs of production they have ever experienced!*"

INVESTIGATE SWISHER FEED SERVICE — THE MODERN FEED *MANUFACTURING* FRANCHISE

Get complete details by sending the handy coupon or write, phone, wire today!

Wm. Davies Co., Inc.
Feed Division
Danville, Illinois

☐ Please send more details on your Feed Service Plan
☐ Have representative call

Name _____

Company _____

Address _____

County _____ State _____

SWISHER FEED SERVICE

FEED DIVISION OF WM. DAVIES COMPANY, INC., DANVILLE, ILLINOIS, PHONE HICKORY 20290

New Competition For Eastern Dairymen

AMHERST, MASS. — Increased competition is among the problems to be faced by New England dairy farmers in the coming years, Dr. Thurston Adams, head of the University of Vermont agricultural economics department, told the New England Agricultural Economics Council here recently.

Such competition, Dr. Adams said, may come from New York state, where production increases during the past 20 years have doubled the New England rate, or from milk concentrates.

Other factors which Dr. Adams said have caused big adjustments in New England dairying — and may cause bigger ones in the future—include increased needs for farm credit, increases in cash operating expenses, higher output per worker, a decrease in the proportion of New Englanders actually engaged in farming, off-farm employment and migration of city workers to rural areas.

"The bulk milk tank and assembly system has made milk much more mobile," Dr. Adams said. "One of the effects of this may be to increase the competition our northern New England farmers will face from New York state and possibly further west."

He said the rapid increase in the New York milk production rate "places a rather effective brake on the extent that our New England price should exceed the prices paid in the New York-New Jersey market supply area.

"With bulk tanks making milk more and more mobile, it seems clear that this differential may tend to narrow. Then, too, milk production in the Midwest has not adjusted to the drop in the demand for butter and some other manufactured products, so out there prices have declined relative to ours."

Dr. Adams quoted dairy authorities as saying concentrated milk, sterile or fresh, "is just around the corner."

"Technological problems seem to have been solved but the marketing problems it (concentrated milk) faces are still formidable," he said. "If it should come it could displace Class I sales.

"This would result in adjustments here because northern New England farmers can't make any money producing Class II milk." He also cited the possibility of adjustments to prices paid local producers and rearrangements of the Federal Milk Order system in New England.

Dr. Adams said it was "one sure prediction" that the future of dairying in this area will be a period of continuing change and adjustment. "But," he said, "those in production and those in marketing who are in a position to make the change face a favorable outlook."

PROMOTED TO MANAGER

WHITTEMORE, IOWA — Willis Bleuer has been promoted to manager of the Whittemore Co-op Elevator, succeeding the late LeRoy Farrell.

T. A. Eadon, Jr. E. M. Woodrich

Chase Announces Two Appointments

NEW YORK—Chase Bag Co. has appointed Thomas A. Eadon, Jr., as sales manager of its New York sales department, of which W. J. Newhouse is manager.

Mr. Eadon has been connected with the firm's Philadelphia branch since 1948, having been named sales manager at Philadelphia in 1956. He is a native of that city and a graduate of the University of Pennsylvania.

E. M. Woodrich, who has been associated with Chase's Philadelphia branch as a sales representative in the Baltimore area, will succeed Mr. Eadon as sales manager in Philadelphia. He has been with Chase since 1953 and served as a salesman in Oklahoma before being assigned to Baltimore.

Mr. Woodrich was born in Kansas and was graduated from the University of Oklahoma.

Control of Grubs on Dairy Cattle Tested

COLLEGE STATION, TEXAS—A systemic insecticide (Dow ET 57) resulted in a 91.5% effective grub control on herd replacements and non-lactating dairy cattle in tests at the Texas Agricultural Experiment Station.

According to a report from the station, there have been no previous reports of using systemic grub control in dairy cattle, although beef cattle producers have obtained 81-96% control with the systemics. "This systemic has not been approved for lactating dairy cows because of the elimination of the pesticide in the milk. The Pure Food & Drug Administration has approved the use of this systemic on beef cattle, when the animals are not slaughtered within 60 days after treatment," the report noted.

In the experiments, 42 animals received a single treatment of one part of the systemic to two parts of water administered as a drench at the rate of 1 oz. per 100 lb. of body weight.

The treatment administered on June 14 gave the highest percentage of control, 93.8, and the treatment on July 23 gave the lowest, 89.4. There was no significant difference in gain or loss of body weight of treated animals as compared with animals not treated.

These limited tests indicate the best time to treat replacement heifers and non-lactating dairy animals for grubs with systemics is early June. Dairy farmers could never treat the complete herd because of lactating cows. Non-lactating cows and young cattle may be treated in early June and all cows that go dry in June and July could be treated as they are dried off

Further information on the Texas tests may be obtained by writing the Agricultural Information Office, Texas A&M College, College Station, Texas.

The 4 Stages of
BLUE STREAK
Praternautics
Accelerate Income • Hold Down Costs
Broaden Profits
These Blue Streak
PAYLOAD ASSEMBLIES
BOOST the Miller's
Business into the
PROFIT ORBIT
Have a PRATERNAUTICS SPACE-N-TIME ENGINEER call on you with a complete Package Feed Mill kit and blue prints. Write, wire or phone today!
STAGE ONE
FIRST STEP IN STOPPING FLIGHT OF PROFITS—on a partly designed launching site.
STAGE TWO
Powered by ADVANCED PAYLOAD ASSEMBLIES.
STAGE THREE
Broadens the Profit Dimension—triggered by TWIN-SPIRAL MIXERS.
STAGE FOUR
The happy, well-served customer leaving the MILL with his payload of Custom Feed—determined to orbit his way back to his favorite Feed Mill just as soon as his needs require.
SPEEDY, EASY RECEIPT OF GRAIN
HIGH VOLUME Triple Reduction Granular Grinding
FAST EFFICIENT TWIN-SPIRAL MIXING with PROPER Supplements
THE PAYLOAD A HAPPY CUSTOMER
Praternautics
BLUE STREAK Prater
PRATER PULVERIZER COMPANY
1537 South 55th Court • Chicago 50, Illinois

Fleischmann's F·I·D·Y
IRRADIATED DRY YEAST
RICH IN VITAMIN D FOR FOUR-FOOTED ANIMALS

How can I improve my formula feeds without increasing my costs?

IT'S EASY WHEN YOU USE MORTON TRACE-MINERALIZED MIXING SALT. It costs no more, yet it contains trace minerals with proven greater nutritional availability—particularly the manganese and iodine required by poultry.

Both these elements in Morton Trace-Mineralized Mixing Salt come from compounds Armour Research Foundation has evaluated and shown to be the most readily utilized by poultry. (Manganese, of course, is necessary to control costly perosis or "slipped tendon" and iodine regulates thyroid activity.)

Poultry feed mixers who use Morton Iodized Mixing Salt get the proven nutritional availability of Cuprous Iodide, a proven superior source of iodine (patented for use by Morton Salt Company; pat. No. 2,772,167) that remains stable from mill to feed bunk, even in pelletized feeds. You can get all Morton Mixing Salts anywhere in the United States.

Mail coupon today for more information!
MORTON SALT CO., Dept. F-711-4
110 No. Wacker Drive
Chicago 6, Illinois

*Name*_____

*Company*_____

*Address*_____

*City*_____

*County*_____ *State*_____

Morton mixing salts

Trace Mineralized—Iodized—Special

Feed Purchasing Motives

"Kansas survey findings show that many farmers do not carefully consider the reasons why they purchase certain feeds."

By Charles E. Reed
Kansas State University

EDITOR'S NOTE: This article, which was originally delivered as a radio address, involves information from a recent survey conducted among 140 Kansas farmers, 70% of whom used formula feeds, to ascertain their feed preferences and why they had the preferences. The author is a member of the staff of the department of agricultural economics at Kansas State University.

Our reasons for discussing the feed purchasing habits of Kansas farmers are: (1) To aid farmers by giving them information which they can use as a guide in their own feed purchases, and (2) to aid feed retailers in better serving their customers by pointing out the factors that farmers consider when they buy formula feeds.

Let us differentiate between buying for consumption purposes and buying for production purposes. The farmer does both. In consumption buying he is motivated by certain urges which have been called emotional motives for buying. Included under this type are such things as hunger, thirst, sex, fear, love of children, curiosity and gregariousness.

Production buying is the purchase of goods which will be used in further production. Buying for production involves rational motives. Among these are such things as efficiency, economy, quality, strength, accuracy, simplicity and many others.

Buying motives, either emotional or rational, determine what particular commodity will be purchased.

Patronage Motives

A buyer, whether he buys for consumption or for further production, may be confronted with several sellers from whom he can purchase the commodity he desires. He is aided in making a choice among them by certain factors relating to the seller which have been called patronage motives. These factors include the seller's reputation, the completeness of his stock, his location, his prices, friendship and many more.

These patronage motives determine why a buyer purchases or prefers to purchase from one seller rather than another, even when the product sold by each is recognized as the same thing or of equal quality.

In his feeding operations, the farmer is, or should be, a rational buyer. Therefore, he would consider the factors which have a bearing upon the welfare of his business enterprise. In our survey attempt to get at these rational motives, we asked the farmers we contacted why they preferred or bought certain brands of feed. The most frequent reasons given were prices, results, dealers and quality of feed.

From a total of 119 responses to reasons for buying certain brands, 25 were for results, 22 for prices and 23 for quality of feed. All these are rational motives which, in one way or another, reflect the farmer's primary consideration for profitable operations.

Confidence in Dealers

Twenty-four answers indicated that certain brands were purchased because they were handled by certain dealers. In this case, farmers had confidence in their dealers to offer a good product at a reasonable price. The product itself apparently was not the matter of first consideration. In the strictest sense, this is not a rational motive because it does not contemplate characteristics of the product itself. It does, however, show how strongly dealer reputation or other attributes of the man who handles feeds influences brand purchases.

Several other motives were also mentioned as reasons for buying certain brands of feed, e.g., because other people use it, dealer mixing, freshness, delivery service, etc. Two farmers indicated their belief that all feeds are the same. Eleven farmers stated that they did not know why they bought a certain brand.

Out of the 119 responses, 72 could be considered as rational (including two for freshness), because they relate to the farmer's experience with the product itself. Perhaps those who used a certain brand because other people did were transitional cases, in the process of testing under their own conditions. The remaining reasons indicate insufficient consideration of the product bought to fit a peculiar circumstance. Certainly, those who did not know why they purchased certain brands would benefit by a more conscious and objective approach to brand choice.

Farmers gave, altogether, 178 reasons for preferring certain dealers. In the order of number of responses the most important ones were: Location 38, friendship 33, prices 32, cooperatives 28, and quality of feed 26. Other reasons mentioned included efficient salespeople, credit terms, salesman calls and attractiveness of store.

Prices, Quality

Prices and quality of goods are subject to only limited control by the dealer. In a strict sense, they probably are not real patronage motives, as the primary consideration here is some attribute of the product, and controllable not so much by the retailer as by the manufacturer. If we eliminate these as patronage motives, the important ones remaining are location, which is convenience of access; friendship, which boils down to a matter of dealer personality, and the fact that the store is a cooperative, which involves a matter of type of business organization.

Almost all the farmers contacted indicated that they could be attracted away from their present dealer by better prices or quality elsewhere. Thus, they do not let friendship or other patronage motives stand in the way of their making a profit.

Many feed retailers offer additional

services such as delivery services, credit terms, etc. The consensus of about three fourths of those buying formula feeds was that these additional services were of no consideration as factors determining where they made their feed purchases. This is not to say that such services are not important. But apparently they do not greatly influence either brand or dealer preference.

The survey findings show that many farmers do not carefully consider the reasons why they purchase certain feeds. Livestock feeders should buy for a good reason. Unreasoned buying may be reducing the profits. For the feeder who is using a certain brand of feed, he should put it to the test of results and profitability.

COMPANY INCORPORATED

EMMET, IDAHO — Farmer's Feed & Seed Co. has been incorporated, listing $200,000 capitalization, by L. K. and Effie Saun and Harold and Ruth Fay Lyon, all of Emmet.

New Control of Grain Insects Discussed

WASHINGTON—Using heat from radio-frequency electric fields is a possibility in control of stored-grain insects, according to Stuart O. Nelson of the U.S. Department of Agriculture's Agricultural Research Service.

Speaking recently at a meeting of the American Society of Agricultural Engineers at Ithaca, N.Y., Mr. Nelson said application of the method on a large scale will depend on further equipment development and experimentation.

Scientists have known for several years that stored-grain insects can be killed by brief exposure to radio-frequency energy. The method has not been developed for commercial use because of high treating costs per bushel of grain. However, the speaker cited reasons for attempting to make the method economically practical.

Advantages of fast kill (within a few seconds) of most stored-grain insects without damage to the grain, and adaptability of the method to continuous processing favor its development, Mr. Nelson said. He mentioned an experimental unit of a capacity of 400 bu. per hour. He said the method so far cannot compete with fumigation.

Indiana Representative

MONTPELIER, IND.—Ted Weaver, Weaver's Hatchery, Wakarusa, Ind., has accepted a position with Blactol Laboratories, Inc., Montpelier, Ind., as the sales-service representative in the northern Indiana area. Mr. Weaver has had many years experience in the poultry and hatchery field.

In addition to their own poultry pharmaceuticals, the Blactol Laboratories, Inc., is a distributor of Merck's animal health line and the American Scientific Laboratories, Inc., vaccines and pharmaceuticals.

Research on How Animals Use Fats Reported by USDA

WASHINGTON—New leads toward determining the factors that affect how the body uses fat are being developed through current research of the U.S. Department of Agriculture.

Nutrition scientists of USDA's Agricultural Research Service have shown in laboratory studies using rats as test animals that:

1. The amount of fat in the diet had less effect on the proportion of caloric intake stored as fat by rats than the type of carbohydrate in the diet.

2. The kind of carbohydrate in the diet may have an important direct effect on the production of fatty livers, damaged kidneys, and on cholesterol levels in the blood.

USDA scientists point out that these are highly preliminary research results. However, they believe that these basic findings with laboratory animals provide important leads for needed research on the role of carbohydrates.

Studies under the direction of Dr. Madelyn Womack of the ARS Institute of Home Economics at Beltsville, Md., compared diets incorporating different types of fat and carbohydrate. Examination of test animals 200 and 400 days on experimental diet showed that rats on diets containing 15% corn oil and sucrose deposited the highest proportion of caloric intake as fat. Rats receiving sucrose with any level of fat stored a higher percentage of their caloric intake as fat than rats receiving cornstarch with a comparable fat.

Average blood cholesterol levels were highest for the group of animals with the highest percent body fat, even though no direct correlation was found between cholesterol level and body fat for individual animals within the group.

Other studies directed by Dr. Mildred Adams compared the effects of sucrose, cornstarch and glucose, particularly as they related to liver fat, kidney damage and blood cholesterol level.

Research demonstrated that a basic diet containing sucrose as the carbohydrate caused rats to accumulate excess fat and cholesterol in the liver, caused kidneys to become enlarged and damaged, blood cholesterol to be increased, and life span to be shortened. Replacing sucrose with cornstarch resulted in less fat and cholesterol in the liver and less enlargement and damage to liver and kidneys, but caused no change in level of cholesterol in the blood of the test animals.

Replacing sucrose with glucose (sometimes referred to as dextrose, and found in many foods) caused even greater enlargement and damage to kidneys and a greater rise in blood cholesterol than did sucrose, but resulted in less fat and cholesterol in the liver.

Feed Dealers Awarded

MANKATO, MINN. — Three Hubbard Sunshine feed dealers from Minnesota, Iowa and Indiana won first prize awards in divisional display contests sponsored by Hubbard Milling Co. here.

Winners of the contest for in-store displays featuring starter feeds conducted this spring were: Minnesota division, Olaf Nyland, Farmers Coop. Elevator Co., Brewster, Minn.; Iowa division, Adrian Neil, Adrian M. Neil Co., Tama, Iowa; and Indiana division, Bill Dodds, Ottawa Lake Coop. Elevator, Ottawa Lake, Mich.

Lloyd Burlingham, famous farm newscaster, reports to feed mixers on the value of fresh-dried sweet whey—KRACO by KRAFT.

BY-PRODUCT BOOST FEEDS...THE THRIFTY WAY!

by Lloyd Burlingham

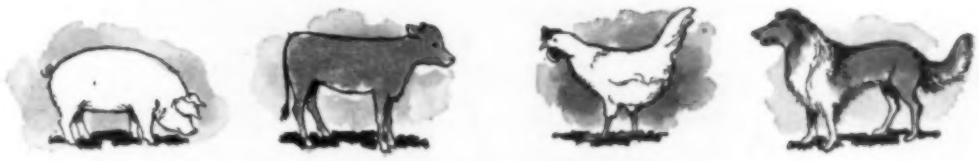
You are interested, I'm sure, in improving the quality of your feeds . . . provided you can do so at a reasonable cost. I believe you can and that's why I recommend Kraco to you.

Kraco is pure fresh-dried sweet whey. A thrifty and natural source of important milk by-product nutrients that makes a good feed even better. When you use Kraco in your formulas, your customers get results. You'll sell more feed, get repeat orders and make more money and profit.

I've watched Kraft make Kraco. Only whey produced in the processing of their finest low-acid cheese is used. They dry the whey in a matter of hours to produce a product that is truly fresh and naturally sweet.

Kraco is guaranteed to contain a minimum of 68% lactose (milk sugar). And high-quality protein (largely lactalbumin). You also get the important whey factor, milk minerals and B complex vitamins of whey. No wonder Kraco makes good feeds better.

They all get a lift—when you boost their feeds with KRACO made by KRAFT



For full details, ask your Kraft Man—your source of superior milk by-products

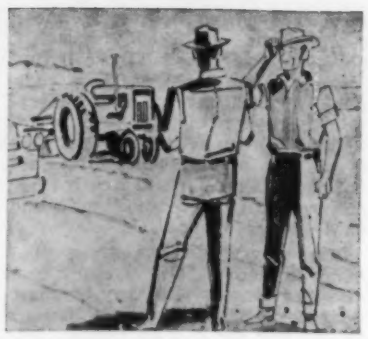
KRAFT FOODS
AGRICULTURAL DIVISION
CHICAGO 90, ILLINOIS

FISH MEAL • FISH SOLUBLES
LIVER MEAL—VITAMIN OILS
FEATHER MEAL—FEED INGREDIENTS
ALBUMINA SUPPLY CO., INC.
82 Beaver St., New York 5, N. Y.

'HOW I SELL TO FARMERS'

'Figure with pencil and paper for him. . . . It pays to be nice to the ladies. . . . In this biz, persistence, consistency and patience often win out. Don't give up.'

By a Feed Salesman



EDITOR'S NOTE: An enthusiastic and successful feed salesman, who prefers not to have his name used in connection with this article, tells in his own personal style and words how he gets and keeps customers for a feed dealer. He has much to say about selling to the farmer which will benefit other salesmen and dealers.

v v

I am a feed salesman. Every morning when I come to work I've got to be thinking about the calls I am going to make that day. It makes no difference if the weather is sunny, whether it's r a i n i n g pitchforks, whether a tornado is brewing or whether a blizzard is howling. I've got to get out in the territory and call on farmers to try to sell them something if I expect to make a satisfactory living.

It's not the easiest job in the world, but I like it. Believe me, it is never boring. You deal with a lot of different people, some nice, some tough. You learn to keep your tongue, to listen when farmers want to talk, to never violate a confidence and always to try to bring the conversation back, diplomatically, of course, to things the farmer might need and which you can sell him. Because that, of course, is the purpose of your visit.

Now take my potential, for example. I sell in a radius of about 15 miles from where the feed store is located. Roughly there are about 150 farmers in that area. My boss has a feed mill in another town about 15 miles from the town in which I work. In my town we have a feed store and a mobile mill. I'm out in the field trying to develop business.

I work on a salary and commission. I've got to sell 50 tons of feed per month before I get a commission. I am able to call on 12-14 farmers per day, depending on how lucky I am on mileage, whether farmers are out in the field or if I have to wait to talk to them.

I use a pickup truck. Usually I make business-getting calls on Monday and Tuesday. Then I'll deliver on Wednesday. Thursday and Friday I'm back making calls again, with more deliveries on Saturday.

I like this system. When I deliver feed and farm supplies on Wednesdays, I sometimes have a chance to ask the farmer if he has made up his mind about something we discussed Monday or Tuesday. Often he has and I get the extra order for the next delivery. Man, I've sure discovered there is no substitute for "asking for the business." Ever heard of a guy who didn't get an answer when he asked a girl to marry him? You can't just remain silent and expect the farmer to say, "Well, I think I'll take some of the dairy feed." You've got to say, "Why don't you let us bring a half ton out next Saturday?" Or something like that. Make him say "yes" or "no."

I call on my regular customers every second week. Then a couple of times a month I come around with the weigh scale. I weigh hogs and cattle—free, of course. But I watch for a chance to talk gains, cost of feeds with farmers. I carry a lot of sharp pencils and notebooks. Believe me, you have to do some figuring when weighing.

I figure for farmers how much they'll get if they incorporate their grain in a grain and mix program at the moment. I figure how much they'll get if they sell their corn at the moment. And a lot of other things. The farmer is not lazy, but he's often too busy, or thinks he is, to stop and figure with a pencil. And a farmer will listen 15 minutes longer to you if you figure with pencil and paper for him. He's fascinated by a pencil and figuring pad. He knows it's the real type of barnyard economics he can understand.

On fellows I don't sell, I call every third week. Just friendly calls. I call on such prospects three times in a row, every third week.

If I don't sell him something, I skip him for a month. Then I'm back again for three calls, one every third week. I never give up. I always drop in now and then hoping I can be of service, and make a sale. Lots of prospects buy on the sixth or seventh call. Maybe it's something small, and maybe it's something big. Some such

Green Banner

MIDWEST ALFALFA BLENDERS, INC.

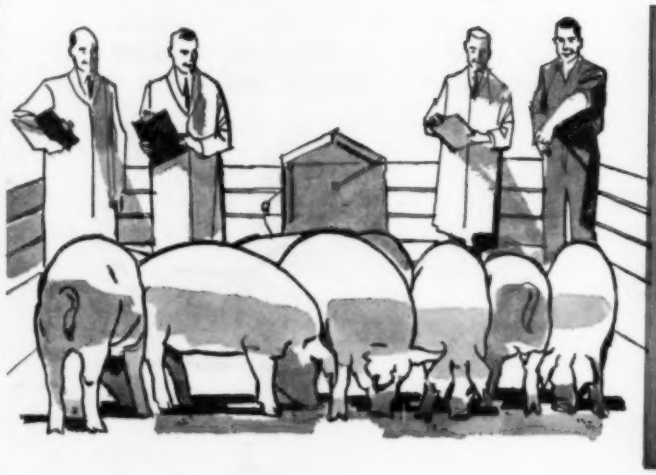
Ranch Mart — 95th & Mission Road

Kansas City • MI 9-0386

Dehydrated Alfalfa

Hog feeding comparisons show...

Arsanilic Acid produces



Feed	Feed per pound of Gain	Feed Cost per 100 lbs. Gain
Basal Ration	3.6 lbs.	$9.76
Basal Ration plus 3-nitro-4-Hydroxy-phenylarsonic acid	3.47 lbs.	$9.45
Basal Ration plus 4 antibiotics*	3.33 lbs.	$9.33
Basal Ration plus Arsanilic Acid	3.32 lbs.	$9.06

Jordon, C. E., J. H. Conrad and W. M. Beeson, Purdue University Agr'l Exp. Station Mimeo A.S. 238 (Final Report), November, 1958.

*5 Gms. Chlortetracycline, 7.5 Gms. zinc bacitracin, 2.5 Gms. penicillin and 5 Gms. oxytetracycline.

THREE NEW TECHNICAL INFORMATION FOLDERS AVAILABLE...

They explain in complete detail what Arsanilic Acid is, what results it gives, practical field testing behind it, its safety, forms, prices, as well as complete labelling instructions:

- **F-400**—How to Fortify & Label Swine and Poultry Feeds with PRO-GEN (Arsanilic Acid).
- **F-401**—PRO-GEN® (Arsanilic Acid) for Swine Feeds.
- **F-402**—PRO-GEN® (Arsanilic Acid) for Pullet and Laying Feeds.

For your personal copies write to ABBOTT Laboratories, Chemical Sales Division, North Chicago, Illinois

accounts that are tough to get turn out to be fine feed customers. In this biz, persistence, consistency and patience often win out. You can't give up.

I keep cards on every customer and the days on which I call on them. The card also contains sales I make. I know exactly what each is buying. Some farmers buy only hog wormer and mange cure from us. I call back on these fellows always angling for feed sales. I've got an in because they buy the hog wormer. Lots of times I open up the feed account.

I sell feed, mobile mill service, fertilizer, twine, block salt, poultry and barn equipment, poultry and livestock remedies, livestock feeders and waterers. I sure have a lot of items to mention. I group them seasonally. When I know hog herds are increasing I mention feeders and waterers. I mention sprays well ahead of the season.

We also figure to have about two special items twice a month, with a special price. That gives me an in to call on farmers and say, "I've got a special buy for you this week that'll save you money." This type of selling works out.

Experiences Described

Many different experiences befall me when I call on farmers. Lots of times, if the weather is bad, the farmer will sit in the pickup truck with me and talk. That's usually when he doesn't want me to stay too long. But often those conversations last long, and he buys a lot, for I suggest many things to him.

Sometimes I have to follow him around while he milks the dairy herd, or uses his auger wagon to fill hog-lot feeders. Or maybe he is plowing in the field a quarter of a mile away. If he's a regular customer and I can drive the pickup truck out to the plowing scene without going over a plowed section, I do just that. He'll always stop plowing for a minute or two to discuss his current needs.

The farmers I call on always know exactly what day I'll call on them. That helps to line up orders. Some farmers tell me always to look a certain place for orders, if they are not around. They pin these orders on barn doors, or other places. I know where to look.

But I always like to talk to the farmer himself, if I can. That way you can suggest other items to him, too, and make more sales now and then.

One thing I have to be careful about is laying myself wide open to do farm chores. I am always willing to give a farmer a lift when he has some heavy object to handle. I'll even gather eggs if the farmer is busy and I can see that he is behind the eight ball. But I won't go out in the field with a tractor and plow.

One farmer asked me that, and I said, "Sure, if you'll take my feed route and go out and sell feed."

"Nope," he said. "I would rather plow."

Quite a few farmers become friendly. After all, I visit them regularly. I'm different from a cold canvass salesman. I call the farmer by his first name and he calls me by my first name. I know all about him, his family, his herds, crops and his farm problems. I see some problems. He tells me of others.

I get invited to dinner on a farm quite often. I always accept. Not only do farm meals really make you full and happy, but the hospitality makes this sales job a little easier to handle and many a sale can be made over casual conversation at a farm table. Don't turn down a farmer's hospitality at mealtime even if you make fewer calls that day. Some farmers have even offered me a bottle of beer on a hot day. I don't like to accept, because it is bad business to drink on the job. The next customer smelling hops on your breath, might not understand that you were so dry your mouth was like leather.

Most of my selling on the farm is done with men. Of course, some women handle the farm flocks, but in 85% of the deals it's the man who has the final say-so. But it pays to be nice to the ladies, fellows, because a lot of farmers leave the feed orders with the wife. You've got to make a good impression on her, too, else she might tell her man to go buy elsewhere.

How much do I sell per day? Well, some days I don't sell a darn thing, if you figure a dollar and cents order. Other days I may come back to the office with up to $500 worth of business. But when you are calling on a farmer, asking if you can serve him, or calling attention to a new product, or passing on a farm management tip, you are SELLING, even if you don't get an immediate order.

I don't have much trouble with collections. Farmers see me so often they know they have to pay regularly. If they fall behind I drop a gentle hint. If I get some customers who are real delinquent, my boss always comes along with me, and helps me work out a payment settlement with the customer. That's the best way, talk it over man-to-man—and with the boss in on the deal.

Farmers like to complain, usually about the feed. Maybe they are tired from overwork, maybe they are worried about taxes, financing or what not. So some of them take out their gripes on the feed salesman. You have to recognize this factor when you sell in the field. Let it roll off your back. Sympathize with the farmer or kid him out of his "mad," depending on what kind of fellow you know he is.

If he harps on the feed, investigate. Maybe you'll find that the reason

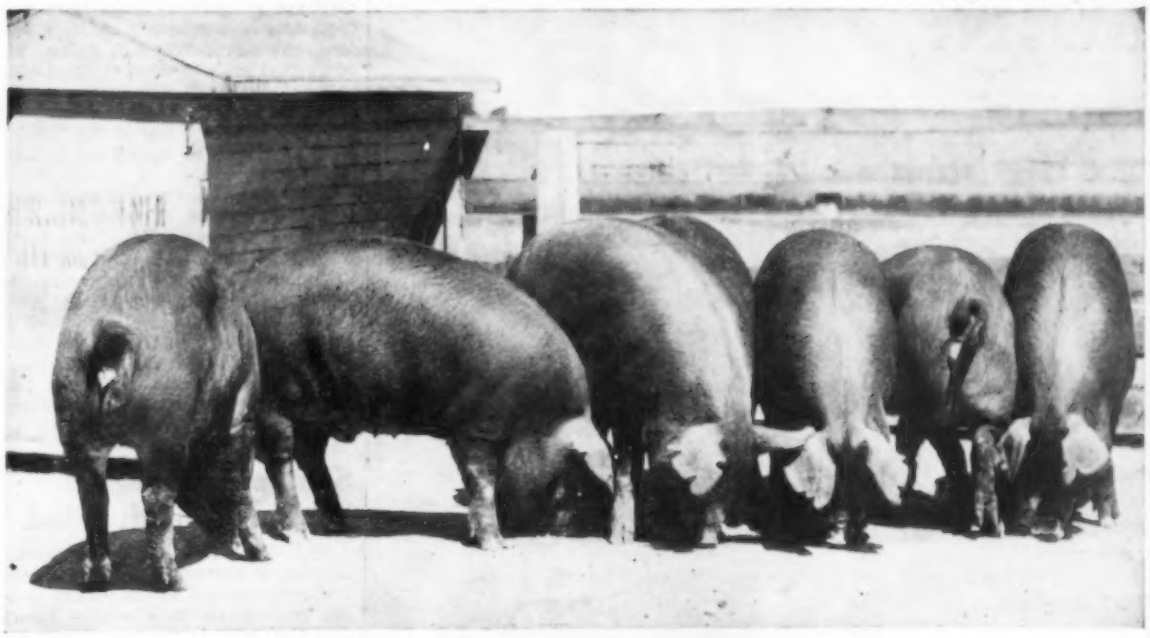
DAIRY PRODUCTS USE HIGHEST IN IRELAND

NEWARK, DEL. — Irish whiskey is not the leading drink in Ireland, as many people think. It's milk!

The three countries having the highest per capita consumption of dairy products are Ireland, New Zealand and Finland—in that order, according to latest figures from the U.S. Department of Agriculture, reports Mrs. Marjorie Whittaker, nutrition specialist at the University of Delaware.

The yearly per person use of milk and other dairy products in Ireland averages 1,507 lb., 1,416 lb. in New Zealand and 1,265 lb. in Finland.

The U.S. ranks 15th among countries of the world in per capita consumption of dairy products, 8th in per capita consumption of fluid milk and cream, and 11th in cheese consumption.



the most economical weight gains!

"Arsanilic Acid produced the most economical gains." That's how Purdue University swine specialists described the effectiveness of Arsanilic Acid following the second year of hog feeding comparisons with several antibiotics and another arsenical.

For the second straight year, Arsanilic Acid proved to be the most efficient, best performing growth stimulant in the 90-day practical feeding tests.

In the 1958 feeding, pigs receiving Arsanilic Acid in their basic farm ration produced gains for about 9¢ per pound to market weight. This included the cost of adding Arsanilic Acid to the basic ration. These 9¢ gains were the lowest-cost of all lots by far. They resulted from a combination of faster daily gains and better feed efficiency than any other lot.

Effective in Supplements and Concentrates: Arsanilic Acid in your supplements, concentrates or complete feeds will give them the "punch" they need when it counts most. It can give such outstanding results because of its *low-cost and proved effectiveness.* Hogs make better use of their feed . . . make thriftier gains all the way to market time.

For more satisfied customers and better resales . . . make sure your supplements and concentrates are fortified with safe, effective Arsanilic Acid.

Arsanilic Acid

a product of Abbott LABORATORIES

CHEMICAL SALES DIVISION, NORTH CHICAGO, ILLINOIS

IN CANADA: 1350 COTE DE LIESSE ROAD, MONTREAL 9, QUEBEC

810515-R1

PRO-GEN®

ARSANILIC ACID ADDITIVE

Get it in the Midwest from

Carroll Swanson Sales Co.

Box 1034, University Place Sta.

Tel. CR 9-8881 Des Moines 11, Iowa

IT HAPPENS EVERY DAY— Latest Rulings in Labor Relations

CAN YOU DISCHARGE AN EMPLOYEE WHO REFUSES TO WORK OVERTIME ?

JIM, WE'RE COUNTING ON YOU TO STAY TONIGHT AND HELP OUT. WE'LL PAY OVERTIME.
SORRY BOSS, I'VE GOT TO MAKE THE 5:15.
JIM, THIS MAKES SEVERAL TIMES YOU'VE RUN OFF AND LEFT US IN A JAM. HERE'S YOUR FINAL CHECK.
PRIVATE
WE'LL SEE ABOUT THAT.
WE'VE WARNED JIM SEVERAL TIMES---
I HAD TO MAKE A TRAIN!
ARBITRATOR'S DECISION
YES, IN ABSENCE OF CONTRACTUAL LIMITATION, EMPLOYER HAS RIGHT TO REQUIRE OVERTIME WORK WITHIN REASONABLE BOUNDS.
Based on a 1959 Arkansas Decision

CATTLEMEN:

Don't let shipping steal your profits!

Every pound that cattle lose when shipped from range to feedlot represents lost profit. But INJECTION SPARINE given to cattle prior to shipment cuts such weight losses *by over 50% in most cases.* Thus, SPARINE makes money for you.

Because INJECTION SPARINE controls tension, nervousness, and unruliness, you should talk to your veterinarian about SPARINE before you ship cattle.

Remember SPARINE's five advantages:

1. Shipping-weight losses are reduced.
2. Handling and loading time is cut.
3. Cattle are not "knocked out" by SPARINE even in transit.
4. Fence walking, bawling, and milling upon arrival at the feedlot are stopped.
5. SPARINE is safe to use in cattle and all farm animals.

AVAILABLE ONLY FROM VETERINARIANS

Wyeth
Philadelphia 1, Pa.

INJECTION
Sparine
HYDROCHLORIDE

some cows got off their feed was that they got a draft on them from an open door or window. Or perhaps the feed was stored where it picked up odors that made it unpalatable. Good natured, thorough investigation will show the farmer you mean to serve him well. Quite a few of the "feed" complaints will be ironed out in just that way.

When I start out selling every day, I feel challenged at what the day will bring. I always think "here I am setting out to call on 150 farmers this month, some two or three times. They represent a tremendous purchasing power. I'm going to do all I can to see how many of their feed and other merchandise needs I can see and mention to them. At the same time make some extra money for myself. It's a great game."

Southern Georgia's Broiler Growth Cited

GLENNVILLE, GA. — "South Georgia is the coming center of the broiler industry," stated Emory Godbee, manager of the Chestnut Mountain Hatchery, in a recent speech before the Glennville Lions Club.

Citing the use of locally-grown corn added to a feed supplement, Mr. Godbee stated that broilers could be grown cheaper in this area than in northern Georgia. In a highly competitive industry the shaving of a fraction of a cent per pound from cost of production can make the difference between profit and loss, he asserted.

Farmers in the Glennville area of eastern Georgia are increasing their capacity for broiler production and it is fast becoming one of the most important sources of farm income.

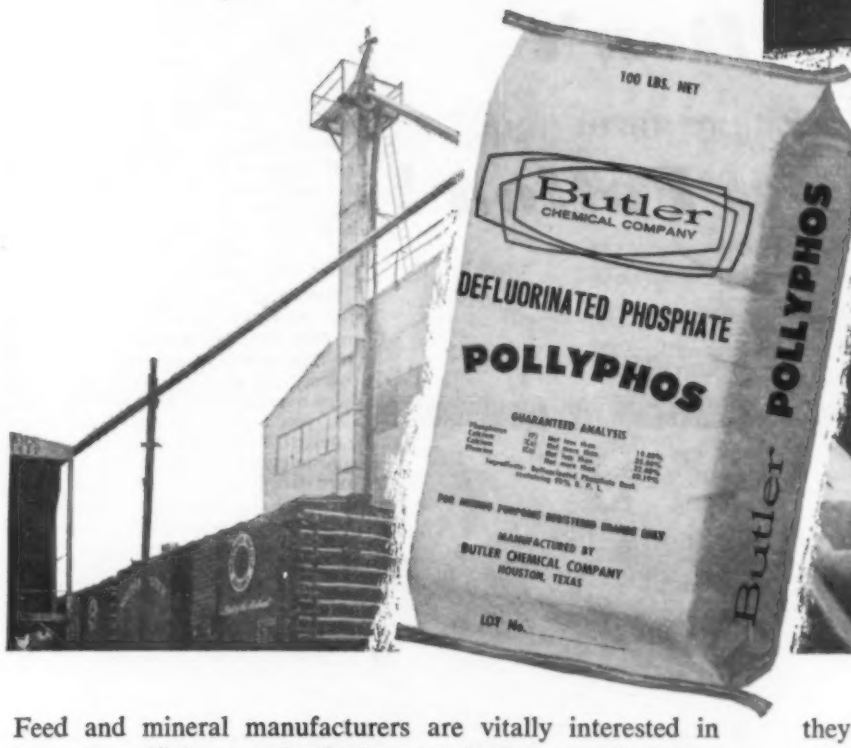
Grain Officers Elected

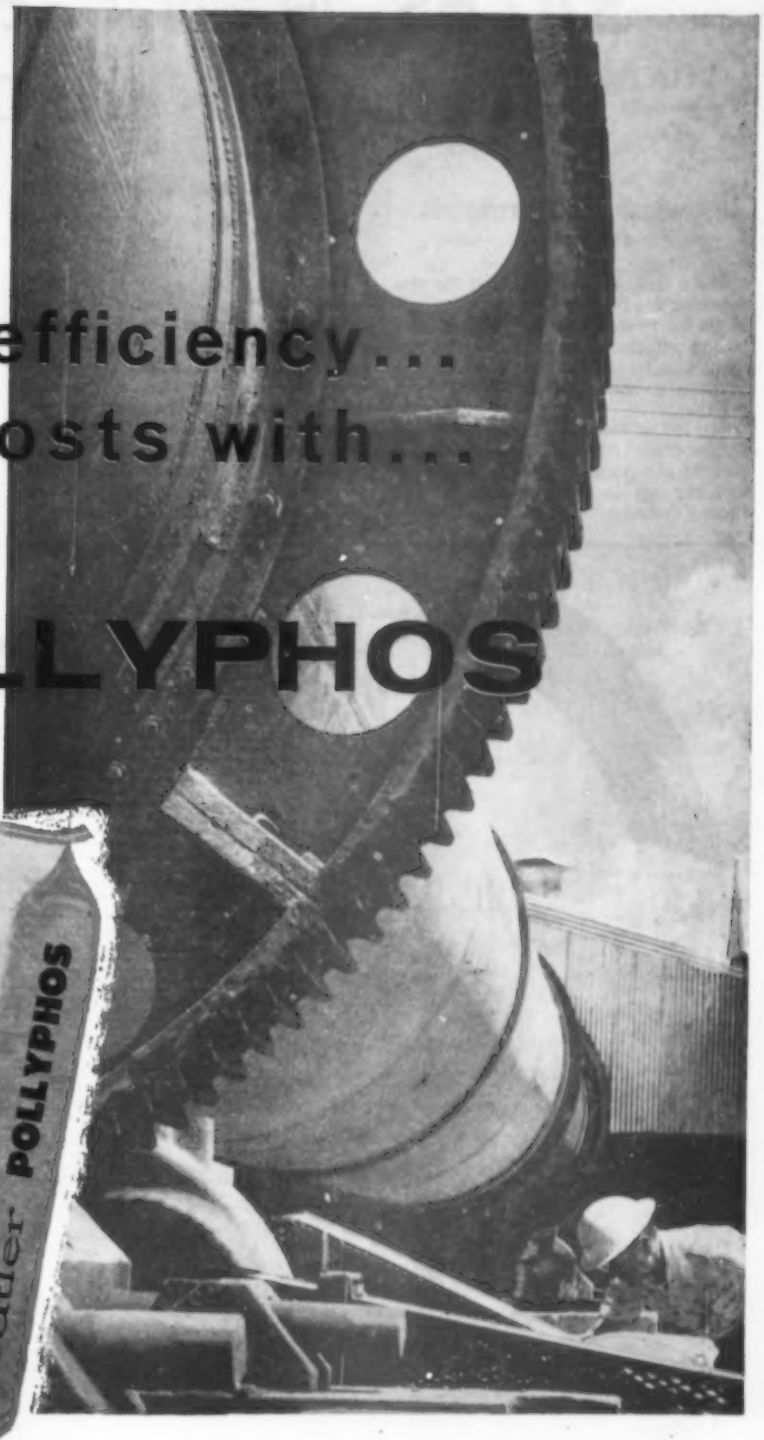
OMAHA — The Omaha-Council Bluffs chapter of Grain Elevator and Processing Superintendents has elected Claude W. Myler, Jr., Kansas Grain Co., Council Bluffs, president for 1960. Charles E. Grossman, Scoular-Bishop Grain Co., Omaha, was elected vice president, and John S. Sorenson, Vanice Grain, Inc., Council Bluffs, was elected secretary-treasurer.

REMEMBER TO ORDER
CHASE BAGS
There's None Better!

Increase efficiency... reduce costs with...

Butler POLLYPHOS





Feed and mineral manufacturers are vitally interested in increasing efficiency and reducing costs in their manufacturing processes. With increased efficiency they produce better products . . . and at the same time are able to pass on . . . to their customers . . . these products at lower costs.

BUTLER CHEMICAL COMPANY accomplishes both of these factors for their customers. Through increased efficiency they reduce costs in producing the finest quality defluorinated phosphate . . . BUTLER POLLYPHOS.

As a result . . . BUTLER is able to deliver POLLYPHOS containing the highest phosphorus content — 19% — at the lowest cost per unit of phosphorus . . . to formula feed and mineral manufacturers.

Let us acquaint you with the cost-cutting advantages that POLLYPHOS can provide you with . . . in bags, or in bulk, in truck or in carload lots. Any of our sales agents or our sales division will be happy to answer your inquiry.

8904

Butler
CHEMICAL COMPANY

Sales Division: Esperson Building
Houston 2, Texas · Phone CA 2-9711

Plant & Warehouse: P. O. Box 938, Galena Park, Texas, Phone OR 2-7587

SALES AGENTS: Warner Brokerage Co., Inc., Minneapolis; Carroll Swanson Sales Co., Des Moines; Warren Sales Co., Denver 2, Colorado; James P. Sprigg Co., Los Angeles; White Star Concentrates Co., Portland; E. A. Towns Limited, Vancouver 1, B. C.

SALES MANAGEMENT

Getting the Job Done

By Garland E. Benton
Southern States Cooperative

EDITOR'S NOTE: What makes a good salesman and how to help him be one if he isn't is the theme of this article taken from a talk by Garland E. Benton, director, feed distribution, marketing procurement, Southern States Cooperative, Richmond, Va. Mr. Benton presented his thoughts on salesmanship and sales training at the Dawe's Sales Management Clinic in Chicago. He discusses the importance of hiring the right man for sales posts, executive leadership, fundamentals of selling and proper use of sales training tools. Mr. Benton scoffs at the belief that salesmen are born and not made. He says, "We believe that any intelligent person with a desire to learn and to put what he learns into practice can be made a good salesman."

More and more competition for the farmer's feed dollar is causing . . . all of us to re-evaluate our feed distribution efforts and our sales department and to try to analyze them and prepare to meet the increased competition.

We know that the challenge of the future means that we must critically look at our organizations to see if we measure up to the demands of our farmer-patrons.

We must see that our sales forces understand that they have a responsibility of being able to see the patron's or customer's viewpoint and to be able to help him plan wisely in order that he might make the business of farming pay better.

The first purpose of a sales organization, naturally, is to sell. Research is needed to keep our sales departments effective, and I think a simple definition of research is finding out what people like and doing more of it and finding out what they don't like and doing less of it.

I think at times we need to get the whole story and not jump at conclusions . . .

"Plan the Job"

To keep an effective sales department, an organization must, of course, first plan the job to be done. You have to determine your potentials, and then, of course, you have to set goals. That is the objective of all of us in this sales management field.

Then we have to hire the men to do the job. Then we must train those men to do the job. And then create the urge to do the job. Then we have to measure the salesmen's performance.

I think all of you realize . . . that 89% of the lost sales and 63% of the lost patrons are traceable to faults or qualities of your salesmen. I am one that believes if a sales manager is to be chosen wisely, he should be selected for his ability to impart skill to others as well as on the basis of his own selling records. I certainly don't believe in the theory that a coach can create an effective team if he hasn't played the game. I feel that a successful sales manager must have built up as a part of his background of experience a solid basis for training salesmen under his directions. He must be in a position to sell—and to tell and to show others how to improve their results.

Generally speaking, there are no new concepts or new fundamentals in this sales presentation field and in this sales management field. Of course, the goal of every successful sales manager is to have an enthusiastic, productive and stable sales organization. An organization of this character, of course, is the result of hard work and careful attention to certain basic principles, namely:

1. Careful recruitment, selection and placement.
2. Adequate training on products, organization, procedures, and sales techniques.
3. Competent supervision and leadership.
4. Compensation that provides for recognition, incentive and security.
5. An opportunity to get ahead.
6. An opportunity to blow off steam occasionally.

The formula for hiring productive sales personnel and keeping sales at the lowest possible cost is to discover the applicant's success and failure traits in advance of employment.

That is a high-sounding presentation, I know, and it is not as easily done as said, but it should be the goal of everyone of us to try to learn the traits and characteristics of a man before we hire him, and I often think that in hiring a man that it is about like a woman selecting a mate. She always tries to find the perfect man and then she wants to change

Leaders Don't Follow!

. . . they just keep going ahead — like the RAY EWING Company's recent announcement of its new Electronic Computer Formula Service for the Feed Industry.

This leadership, which pioneered the concentrated dry vitamin premix . . . which developed the first fermentation product with a guaranteed potency produced primarily as a growth stimulant . . . which perfected the first uniform product for broiler pigmentation . . . was looked to for the inevitable use of the Science of Electronics to increase speed and improve efficiency in computing feed formulas.

More and more leaders in Feed Manufacturing are combining Ray Ewing Nutritional Service and Ray Ewing top quality products with their own proven production know-how to supply the feeds of the future for the flocks and herds of today.

THE Ray Ewing COMPANY
QUALITY GOES IN — BEFORE THE NAME GOES ON

2690 E. Foothill Blvd.
Pasadena, California
AMES, IOWA
FORT WORTH, TEXAS
COUNCIL BLUFFS, IOWA
LANCASTER, PENNSYLVANIA

More and More . . . Feed Mills Are using More and More Stabilized ANIMAL FATS and MEAT PROTEINS

Find Out Why . . . WRITE
NATIONAL RENDERERS ASSOCIATION
Organized in 1933
20 N. LA SALLE ST.
CHICAGO 2, ILL.
Phone FR 2-3299

him. And certainly, at times we try to get a man that we think is going to fit into our organization, and immediately we start changing him.

Sometimes we warp his tendencies to do the job that we want him to do because they all don't fit into a mold. We just can't shape them into replicas of ourselves or the other hotshots that we might have within our organization.

One thing I'm sure of, the person responsible for the sales job should select his own personnel or, at least, have the final say on selection.

You and I know that when sales slip, managements of our organizations don't point at the personnel department. They point their fingers directly at us, and if we have the responsibility, it is necessary for us to draft and coach our own team.

It is a well-understood fact that one of the most valuable assets of a business is its executive leadership. The caliber of its executives is reflected in the character and integrity of the organization, and in our organization we have been quite proud of the integrity that we have developed over a 35-year period.

Let us examine some of the personalities, the requirements and qualifications of a modern sales executive to the end that we may find inspiration and information.

Certainly you need:

(1) Inspirational leadership. A sales executive without that intangible is

(Turn to page 56)

AUTOMATIC MEDICATION

MEDI-MATIC*

SEMI-SOLID BLOCK

Write or Call

ASSOCIATED FEED PRODUCTS, Inc.

1220 FLOUR EXCHANGE BUILDING
MINNEAPOLIS 15, MINN.
Phone: FEderal 6-4527

*Registered Naremco

another Olin Mathieson packaging idea!

SKID-MASTER

Tough kraft multiwalls...with a non-skid finish you can't see or feel!

Don't sacrifice strength, good looks, or printability for skid-proofing! Skid-Master multiwall bags provide protection against sliding damage with an "invisible" non-skid finish built right into the paper itself! No sticky coatings, tacky sprays, or surface grit... just clean, tough, non-skid kraft! Call or wire Olin Mathieson today: Packaging Division, W. Monroe, La.

OLIN MATHIESON PACKAGING DIVISION

FROSTKRAFT IS A TRADEMARK

Honeggers' can help you...

DOUBLE YOUR TONNAGE

Watch this area each month for a new dealer who has Doubled His Tonnage and Tripled His Profits on the Honegger Program.

Francis J. Buckley
BUCKLEY FEED & SUPPLY
DeWitt, Iowa

To PROGRESSIVE FEED DEALERS

If you're shipping any amount of tonnage at all, you might say it would be IMPOSSIBLE to DOUBLE YOUR TONNAGE over your present program . . . that's what we thought but the Honegger folks have shown us different.

During Honeggers' February promotion we more than tripled our business and participated in the Honegger trainload promotion. That's really moving feed!

There are extra profits from the exclusive franchise of Big "H" Equipment, Honegger Layers . . . Oh, yes, and Honegger Farm Buildings. Corn cribs alone last year was a large-volume item for us.

You can bet we're living better and that we have even bigger plans for the future.

Francis J. Buckley
Buckley Feed & Supply
DeWitt, Iowa

No other feed company in America has so much to offer! →

EXCLUSIVE TERRITORY protection gives the Honegger Dealer plenty of room to grow. A piddling dealer at every little crossroads is not Honeggers' idea of effective distribution.

DEALER TRAINING schools at Fairbury-Forrest and monthly district meetings help Honegger dealers and their sales personnel make sales through service. Their know-how and self-confidence makes selling easy, more effective.

SALES ASSISTANCE from well trained, enthusiastic district managers produces new business and keeps Honegger dealers inspired. Product specialists, such as building and equipment salesmen, help dealers close big sales.

LOCAL PROMOTIONS and "Planned Selling" that move 75-150 tons of feed out of the dealer's stores are not uncommon for Honegger dealers—with bulk of business on cash basis, too. Honeggers help plan and man open houses, hay-makers and ice breakers.

TRIPLE YOUR PROFITS

What others have done....you can do also WITH HONEGGERS' COMPLETE PROGRAM

➔ Write, phone or wire collect for complete details . . . *DAY or NIGHT*. . . Do it today!

HONEGGERS' & CO., INC., FAIRBURY, ILL.

SINGLE SOURCE OF SUPPLY gives Honegger dealers over 190 products sold by no one else in his territory. Combination shipments reduce freight costs, cuts dealer's equipment inventory because you are only a few days away from Honeggers' warehouse.

HONEGGER RESEARCH FARM has attracted over 40,000 visitors in past ten years. Practical research and convincing demonstrations here keep dealers and customers sold on Honegger know-how, and produce more dealer profits!

PATRONAGE DIVIDEND gifts make real boosters of farm wives and kids. Coupon-saving customers get valuable premiums direct from Hőneggers without bother or expense on dealer's part. Result: terrific customer loyalty . . . REPEAT PROFITS!

BULK FEED SERVICE at Honeggers' employs king-sized fleet of hopper cars and modern bulk trucks. Honeggers' bulk farm bins are profit-makers that help dealers sew up business.

not going to be a success over a long period of time.

(2) Organizing and planning ability.

(3) Courage and aggressiveness. Courage to take a positive stand even though it might not be a popular stand with management.

(4) The knack of good human relations, both within the organization and without the organization.

(5) Creative imagination. Taking some of the old sales techniques that have been accepted for years and changing them to create inspiration among your sales force.

(6) Willingness to delegate authority. How often have you seen these one-man organizations that don't grow because the sales manager had been afraid that his top men might replace him at some time. We have been fortunate in our organization in having the responsibility passed down to us by management saying, "Hire a man that can replace you at any time," and, boys, if they are better than we are, they ought to replace us.

(7) Willingness to bear full responsibility. After you have given that delegation of authority, you have got to accept the responsibility for having been the one who has given that authority. And then facing reality, broadminded realism.

(8) Strong internal drive. There are no 40-hour weeks in doing a good sales or sales management job.

And (9) business statesmanship. In these highly competitive times, this is a prerequisite of any good sales manager.

Manpower Principles

Now we have manpower principles that have to be considered. It has been well said that modern business is 85% men, 85% of the success is men, 10% is materials and 5% is money. . . . Sometimes it looks like money is perhaps about as important as men and materials. . . . But in the whole realm of things today, manpower is the foremost thing that we must continue to consider. Putting it more directly, 85% of an executive's job is the art of handling manpower, directing, stimulating, teaching and inspiring.

Since manpower takes up a great preponderance of a sales executive's time and effort, naturally he is intensely interested in every phase of the manpower problem.

The most important sales management problem will always be manpower—selecting, training, handling and replacing, a regular cycle.

Second only to the selection of the right men is their training. How often do we just hire a man and turn him loose on his own? Or maybe we put him out with an old salesman, and many times what he learns from that old salesman are all the bad habits that that man has, rather than the things that we would desire to have him channeled into.

All of you, I'm confident, understand that modern sales training cannot be done on a hit-or-miss basis, for the job of refreshing, inspiring and upgrading salesmen is one that is never finished. New materials and new angles must be supplied continually. Old-fashioned training manuals and materials must be brought up to date and even projected into the future.

A continuous program of sales training is absolutely essential. We certainly need it in view of the growing need for protection against the competition of today and tomorrow. Not so many years ago, training emphasis was placed on product knowledge. Today we know that good merchandising is more a matter of people, volume and perspectives than merely discussing the merchandise. In other words, the salesman must sell end results by appealing to the purchasing motives or, as Jack Lacy, sometimes called America's ace sales trainer, says, "Find the prospect's 'Hot Button'."

Selling Is His Job

Basically, a salesman's job is to sell. That certainly must be mutually understood by the sales manager and the employee. Some feel that if a salesman is courteous, recognizes the patron's importance, knows his merchandise, does a good job of explaining and knows how to close, he is fully equipped for selling. A pretty good definition of a salesman, isn't it?

The trouble is that while there may be a limited number of ways to make a sale, there are thousands of ways to lose a sale. Continuous sales training serves to enlighten the passing parade and, perhaps just as important, it enables the experienced salesman to brush up on fundamentals. Even the best and most experienced salesmen get rusty, fall into bad merchandising habits or forget to do a lot of things in the way they should be done to get maximum results.

How many of us as we get back into the field occasionally try to take shortcuts in our selling presentation and are not successful? And, as we go back over the reasons for failure, we find that we had the knowledge, but we just didn't get the story across to the prospect because we didn't repeat the whole sales story.

So it is necessary that we analyze ourselves and also help to get our salesmen out of the rut that they naturally get themselves into. We become so familiar with what we do and what our products do that occasionally we neglect to tell the prospect, who is not as well-informed as we are, what to expect from the product. We neglect to tell him what he can expect in end results.

Modern salesmanship demands more of a person than was the case in the past. We must teach our salesmen today how to perfect themselves in all of the qualifications of modern salesmanship and how to use these qualifications in such a way as to gain: (1) Increased numbers of new patrons and (2) increased volume from established patrons.

One of the weaknesses in the feed trade today is that we tend to occasionally overlook patrons or customers that have built our business, and we concentrate our efforts on building new business. How often do we say to ourselves, "Well, certainly John Smith is an old and loyal patron, he

can you identify this grain insect by its silhouette?

You've probably already guessed it's a saw-toothed grain beetle. Diamond Premium Brand Grain Fumigant "A" kills it fast . . . with certainty . . . at low cost.

It's fast because it quickly forms a heavy vapor that penetrates to remotest corners, fills every air pocket, blankets every kernel of binned grain.

It's certain because the vapor mixture has 100% active ingredients that kill adults, larvae and eggs, from top to bottom of bin.

Costs less because less gallonage is required per bin.

Safer, too, because it is nonexplosive and has no flash point. Premium Brand Grain Fumigant "A" has no effect on viability of seed grain . . . leaves no odor on grain, no taste, no unpleasant residue.

Details on request. Diamond Alkali Company, 300 Union Commerce Building, Cleveland 14, Ohio.

Diamond Chemicals

Manufacturers and Suppliers of

EXPELLERS

SOLVENT EXTRACTION EQUIPMENT

DRYERS • FLAKERS

GRAIN EXPANDING EXPELLERS

MATERIAL HANDLING EQUIPMENT

Write for information and prices

The V. D. ANDERSON COMPANY

Division of International Basic Economy Corporation

1900 West 96th Street, Cleveland 2, Ohio

Fit the protection to the problem— with versatile, unmatched nf-180

Nothing protects turkeys during the critical growing-finishing period like nf-180. It prevents and controls more turkey diseases than any other drug. The comparison chart below proves it.

With nf-180 you can tailor medicated feeds to fit your needs. Here are three methods in widespread use:

Two-pound level (.011% furazolidone) — fed continuously to help protect against blackhead, hexamitiasis, and other diseases.

One-pound level (.0055% furazolidone) — fed continuously for wide protection against stress-caused troubles and many diseases, except where blackhead and hexamitiasis are problems.

Week-a-month plan — for areas where disease is not as serious. You feed nf-180 at a 2-lb. (.011% furazolidone) level one week a month to help clean up birds, fight stresses, and knock out disease organisms before they cause trouble.

In addition, all three plans help improve feed conversion, step-up growth, and eliminate sub-clinical infections. Buildup of resistant organisms has never been a problem with nf-180—no unwanted side effects because nf-180 is non-toxic.

Why settle for less than nf-180 protection? Review your turkey disease problems, then set up the nf-180 program which will fit your needs. For complete details on nf-180, talk with your Hess & Clark representative, or write, wire, or call for the Turkey Feed Medication Kit to Feed Products Manager, Hess & Clark, Ashland, Ohio.

NT-9-2

Compare nf-180 (furazolidone) with other turkey feed medications

DRUG	Growth Stimulation	Typhoid	Pullorum	Paracolon	Paratyphoid	C. R. D. Sinusitis	Blue Comb	Hexamitiasis	Synovitis	Ulcerative Enteritis	Blackhead	Stress periods
*nf-180 (furazolidone)	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
Chlortetracycline	YES	NO	NO	NO	NO	YES	YES	YES	YES	NO	NO	YES
Oxytetracycline	YES	NO	NO	NO	NO	YES	YES	YES	YES	NO	NO	YES
Bacitracin	YES	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	YES
Penicillin and Streptomycin	YES	NO	NO	NO	NO	YES	YES	YES	NO	NO	NO	NO
Pencillin	YES	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	NO
12½ Penicillin plus 37½ Bacitracin	YES	NO	NO	NO	NO	YES	YES	NO	NO	NO	NO	YES
Erythromycin Stearate	NO	NO	NO	NO	NO	P-? T-YES	P-? T-YES	NO	P-? T-YES	NO	NO	NO
2—Acetylamino 5—Nitrothiazole	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	P-YES T-YES	NO
4—Nitrophenyl Arsonic Acid	NO	NO	NO	NO	NO	NO	NO	NO	NO	NO	P-YES T-NO	NO
A Sulfa—Tin—Arsenical Comb.	YES	P-? T-NO	P-? T-NO	NO	NO	NO	P-YES T-NO	P-YES T-NO	NO	NO	NO	NO

KEY — P: Prevention T: Treatment *Each pound of nf-180 contains 50 grams of furazolidone

nf-180® brand of furazolidone

® vitren corporation

• VITAMINS
• PRE-MIXES
• BIOLOGICS
• VETERINARY SUPPLIES

New Plant at **Individual feed mill NUTRITIONAL SERVICE**

821 GROVE AVE., ONTARIO, CALIF. TEL.: YUKON 6-5096

SAN JOAQUIN VALLEY OFFICE: 291 W. Olive, TURLOCK, CAL. Telephone: MErcury 2-3879
UTAH OFFICE: 2458 Grant Ave., Ogden • Tel.: EXbrook 3-1713

★ Buy and Sell Through WANT ADS ★

will never change." And then as we analyze our monthly records, we find that poor John is gone, and then we go down and find that another good salesman has come along and performed some of those services that we should have been performing for him over a period of time.

Sincerity in Selling

Selling is getting people to do what you want them to do. In other words, good selling is persuasion systematized, and the best way to make persuasion succeed is to base it on sincerity. If we are sincerely trying to help the farmer develop a feeding program that fits his needs and will help him make more money, and are sincere in our efforts, we are going to be successful.

Sincerity in selling will get better results in the long run than native ability or cleverness. You simply cannot beat it. When sales ability is supported by sincerity, a salesman possesses the most powerful persuasive force known. Sincerity wins followers, friends, patrons, and more important, it keeps them.

It costs nothing because it is a quality of the heart, and any man can acquire it. If you will change your whole sales technique, and practice just a few of the concepts that a great salesman over 2,000 years ago tried to teach, "Do unto others as you would have them do unto you," you will be amazed at what happens. And then, as John the Baptist so adequately said, "Cast your bread upon the waters and it will be returned to you, manyfold." And certainly in this agricultural business of ours, I know of no truer expression that we could follow to our advantage.

All of you have some patrons, some feed dealers, some farmers who respect you for what you help them do over a period of time, and in many instances, you forgot the selfish motive of selling feed or some other supplies and tried to help them, and consequently you gained additional business. And that will continue to be true. As we go into this period of fewer farmers and bigger farms, those of us who render the greatest service will gain the greatest volume. The sincere salesman gains his ends by earnestly trying to aid patrons so they will benefit by their dealings with him and with his organization.

Many sales trainers have developed their own dramatic methods of sales training, such as Ralph Everett's race track, Jack Lacy's 5-W's, etc., but upon analysis, you will find that in every instance basic fundamentals in selling are the same.

"Pillars to Hold Up the Roof"

In addition to the base of sincerity, you have several pillars that are essential to hold up this roof of successful salesmanship.

Sales technique or merchandising technique is getting attention, arousing interest, creating desire, getting action, closing the sale and, of course, bidding a farewell, leaving your foot in the door so you can come back at a later date.

Definitely, knowledge of the product, the organization you represent, its policies, the territory characteristics, the demands and your competition is necessary.

Personality — habits and traits which attract, appearance, neatness, expression, voice, gestures, forefulness, tact and courtesy — covers a multitude of the requirements for a successful salesman.

And then, analysis of personal time use, reduction of waste, shorter sales presentation systems and better self-management are necessary if we are to be successful. . . . We try to teach some of our boys that if they would make just one more call a day they would increase their effectiveness at

KRAFT BAG CORPORATION, through correct construction of your multiwall shipping sacks, will reduce seepage and spoilage of contents while minimizing your shipping and storage problems.

If your product fits into a bag — let us make the bag to fit your product!

KRAFT BAG CORPORATION

Gilman Paper Company Subsidiary

630 Fifth Ave., N.Y. 20, N.Y. • Daily News Bldg., Chicago 6, Ill.

Integrated mills at St. Marys, Georgia and Gilman, Vermont

Gilman Paper Co.
St. Marys Kraft Corp.
Gilman Paper Co.
The Gilbarco Corp.
Kraft Bag Corp.

Get Newest
KRAFTPACKER
Open Mouth Bag Filling Machine
maximum accuracy and
speed. May we tell you about our
storage shed models? Remarkable
in performance. Surprisingly
low in price.

☐ We are interested in improving our bag.
☐ We are interested in your Kraftpacker.

NAME OF COMPANY_____
ADDRESS_____
CITY_____ ZONE____ STATE____ PRINCIPAL_____
PRODUCT MFD._____

F

Hatcherymen all agree . . . the Pilch Female crossed with a Leading Male Line outperforms any other combination.

DYNAFOS®

takes the waste out of phosphorus feeding

ENDS THE NEED TO ADD UNNECESSARY MARGINS OF SAFETY!

In feed ingredients, just as in breeding stock, there's no substitute for proved performance. And quality is the big reason why today's new and improved feed formulas are formulated with Dynamic DYNAFOS.

This chemically processed and purified dicalcium phosphate consistently rates high in biological availability. (Each pound of DYNAFOS delivers as much usable phosphorus as 2 to 9 pounds of unprocessed, raw phosphates.) You get top feed performance without having to add phosphorus for unnecessary margins of safety. That's why International's Dynamic DYNAFOS takes the waste out of phosphorus feeding . . . stretches your phosphorus dollar.

And DYNAFOS in unique *beaded form* makes handling and mixing better than ever. Write or wire your International representative for details.

Producers of Living Minerals

MINERALS International CHEMICALS

32-59

FEED INGREDIENTS DEPARTMENT, AGRICULTURAL CHEMICALS DIVISION

INTERNATIONAL MINERALS & CHEMICAL CORPORATION

Administrative Center: Skokie, Illinois

Sales Agents: **EASTERN AREA:** GRANDONE, INC., Needham (Mass.); SUNSET FEED & GRAIN CO., INC., Buffalo; P. R. MARKLEY, INC., Philadelphia; A. G. GREENE COMPANY, Charlotte (N. Carolina); EDWARD E. SMITH COMPANY, Atlanta; E. A. CARTER BROKERAGE COMPANY, Tampa. **CENTRAL AREA:** BULLARD FEED COMPANY, Chicago; GOOD LIFE CHEMICALS, INC., Effingham (Ill.); JOHN F. YOUNG COMPANY, Cincinnati; R. D. ERWIN COMPANY, Nashville; CHAS. F. WILLEN CO., INC., Birmingham (Ala.); STANDARD SALES COMPANY, Meridian (Miss.); The VITA PLUS CORPORATION, Madison, (Wis.). **MIDWEST AREA:** BLOMFIELD-SWANSON, Minneapolis; W. P. MANN SALES CO., Omaha; M. A. McCLELLAND COMPANY, Kansas City (Mo.); B. A. LUCIUS COMPANY, Fort Worth. **WEST COAST:** JAMES FARRELL & COMPANY, Seattle; JAMES FARRELL & COMPANY, Compton, (Calif.). **CANADA:** N. D. HOGG LTD., Toronto.

least 10%. And we always try to encourage them to make that last call. It was amazing that out of a poor day that last call kind of brightened up the day because invariably you got some results. And then, of course, what did it do? It created enthusiasm to do an even better job the next day.

Review of Fundamentals

This sales story, of course, continues to be one of fundamentals, as we have said. Good selling is partly an art and partly a science. It is a right combination of these that creates the ability to secure the order, and I think we might profit from a review of those fundamentals.

It has been developed into a formula, and this AIDA formula has been used by all good sales trainers for the last 50 years. We know, of course, that it is absolutely necessary to get the prospect's attention.

It has been described and you have had the experience in talking to a prospect that you could see him thinking about things far off. And it is well said that many times a man's mind flits from limb to limb like a bird in a tree. How often have we been talking to a man and we found that he was not paying attention to what we said. And naturally, if we didn't get his attention, we couldn't arouse his interest. Certainly we couldn't create the desire to either use the product that we had, to improve the product or to improve income.

And then, naturally a lot of us have the ability to get attention, to create desire, to develop interest, and then do not do that last thing that is absolutely essential if we are to be successful salesmen. And that is get the order. That is the reason we call on these people. He knows it and we know it.

How *often* is it dramatically brought out to us that a salesman didn't ask for the order? I think sometimes we are afraid that the man is going to say "No". We therefore beat around the bush and beat around the bush, and then again we will go in and do all of those things and then walk out without having asked that definite question, "How many of these do you want? Do you want it delivered in bulk or in bags? Do you want it on Tuesday or Thursday? Do you want 5 tons or do you want 10 tons?" If we don't ask that question, we are not being fair to ourselves and to the organizations that we represent.

Salesmen Can Be Made

The old belief that salesmen are born and not made has been proven absolutely false. We believe that any intelligent person with a desire to learn and to put what he learns into practice can be made a good salesman. In this room there are many excellent salesmen, and some of you know salesmen that do not have those prerequisites of what we call a "born salesman", but are highly successful.

I don't think a salesman has to be an extravert. Some of the best ones I've ever seen in our field are these low-pressure boys that get the orders. The farmer or the feed dealer or the feed manufacturer didn't know exactly why he gave the order but he had confidence in the man and he felt that this particular salesman was sincere in his efforts to help him. Certainly we know that these steps are elementary, but we can continue to profit by review.

Many of us do things by instinct, but can't tell others how they should be done. Many salesman have full knowledge of their product but can't impart their information to patrons in such a manner as to cause them, the prospects, to realize the benefits to be derived therefrom.

In training salesmen we feel that training starts in the hiring interview which projects our whole organization's thinking. How many times when we are trying to hire a salesman do we try to impress him by letting him wait outside the office for 30 minutes? And how many of you have called on some people that you know doggone well have nothing to do, but perhaps shuffle some papers and that make you wait?

It doesn't create respect for the organization, does it? It certainly has been my experience that the bigger the man, the more quickly he was to see you. It is always pleasant going into the office of a high caliber executive and finding that he answers the telephone, is not screened by a secretary who wants to know who is calling and what they're calling about. It is rather exasperating to call on a small caliber man and have a secretary, an operator wanting to know who is calling, and then tell you he is out. It certainly doesn't do a good public relations job, and we are selling all the time, whether we are selling to other salesmen or selling ourselves.

A regular training program in training salesmen of course begins with, first, organization and indoctrination. All of us have our particular type of organizations. Then we have to present product or service knowledge, we have to give selling know-how and we have to get them in the field and provide field work leadership.

To effectively train salesmen, it is necessary to have a knowledge of the available tools, to understand how to use them, and a desire to keep at the job. It is understood that with these qualities must be included at least an average ability to pass instructions on to others.

21 Sales Training Tools

Here are 21 sales training tools that can be put into effect at once:

(1) Sales meetings, (2) sales manuals, (3) sales textbooks, (4) sales training bulletins, (5) slide films, (6) motion pictures, (7) special product presentations, (8) instruction manuals, (9) sales promotion aids, (10) merchandising aids.

(11) Radio and television aids, (12) direct mail pieces, (13) visual presentations, (14) samples, models, etc., (15) demonstrations, (16) trial selling methods, (17) correspondence course, (18) central training schools, (19) local training schools, (20) field leadership training and (21) industry or allied training schools such as the one we have here today.

Every sales meeting should include

THE PRICELESS EXTRA

P.T.* Personal Touch service by Amburgo

authorized as a distributor

KLOTOGEN-F ABBOTT

and other leading feed additives, minerals and antibiotics.

THE AMBURGO CO., INC.

Gen. Offices: 1315 Walnut St., Philadelphia 7
Hope, Indiana Fresno, California

NOW!
FROM ABBOTT RESEARCH...
A NEW
KLOTOG
• NEW Nutritive Carrier— Improves Stability!
• NEW Concentration— 16 grams per pound!
• NEW Container— Multi-wall 50-lb. Bag!
• NEW Reduced Cost— Saves up to 16%!

as a "must" a short sales training talk on a specific subject.

The sales manual, of course, is a manual that is broken down to give you the basic concepts of your organization and the sales talk about each of the items that we are merchandising in order that we might review them occasionally.

A good textbook should be used for refreshing our thinking occasionally. I personally like "Salesmanship Practice and Problems" by Bertrand R. Canfield.

Sales training bulletins are an associate function of any sales training effort.

In this day of visual training the slide film is a potent tool. Slide films are absolutely essential. I think Ralph Everett does an excellent job in some of his slide series when he shows you the wrong way and the right way of doing the job.

Certainly a good motion picture costs too much money today, but some of our allied industries and the Department of Agriculture are providing some excellent films that can do some wonderful sales training work.

Special product presentations offer an opportunity to teach our fellows how to do a better job.

A good instruction manual is the best sales tool that I know how to use. How many times do we need confirmation of a story that we are telling a man that doesn't know us too well and hasn't had an opportunity to establish confidence in us? Do you know that a lot of people believe the printed word when it may be a lie? They will believe it, and if we confirm our presentations with the printed word in simple form, they tend to develop confidence in us.

Sales promotion aids: We find that getting a family group around the dinner table at night and using a simple flip-over easel helps us to get the story across to the farmer, his wife and his children. Today you don't sell individuals on the farm. You sell units. The whole family unit is sold, and how often is it that the future farm boy or the 4-H club girl helps make the decision as to where the product shall be purchased?

Merchandising aids are absolutely essential. Salesmen must be taught how to follow through on inquiries. Many times we overlook the fact that when a person inquires, he might be interested in what we have to sell. Quick, prompt follow-up indicates an interest to that prospective patron. Consequently we get volume.

Radio and television aids have been condensed to get them into a short period of time because we pay so much money for them. When we tie them into our sales training programs it helps the prospective customer realize that we are modern and up to date and doing a good job.

We find that direct mail often opens the door so that we can get our foot in and tell the story. If we don't follow it up and mention the fact that the sales story has already been presented to them by direct mail, we miss a golden opportunity.

And then visual presentations. Nothing in the world will convince a man that his dairy cow will eat your feed more than seeing her eat it.

We have samples, models, etc. You can talk about pelleted feed all you want, but if you have a plastic bag of it and throw it out, he gets an idea. And if you get it in his hands so he can feel it, smell it, look at it, you are beginning to create interest, and perhaps desire for use of the product that you have.

Trial selling methods: One result of some demonstrations is the offer to leave the product with the prospect on several days' trial.

A correspondence course is no better than the man who prepares them and unless you are going to put time and effort on a correspondence course and do some follow-up on it, don't initiate it.

I think that by association with successful salesmen at central training schools other salesmen gain inspiration and you can motivate them to do a better job and get up into that high level of people. It is a known fact today that 25% of the salesmen sell 75% of the goods in this country.

Local training schools are absolutely essential.

Field work leadership training is where the sales manager comes in. If you can't demonstrate your ability to get the order to that salesman, it is rather exasperating. We try to teach our boys not to take us to those doggone prospects that they have been knocking on the door for years, because it is natural for that boy in the field to say, "Here is the hot-shot coming. I'm going to show him he's not so darn good." And he takes you to that impossible situation.

We say to them, "Fellows, we know you have some of those. Let's look at those we might be able to knock off and let's call on those the first thing in the morning."

Teach optimism. You have never seen a good salesman that was a pessimist. An optimist creates enthusiasm, and I think farmers as a group would rather gripe than any group in the world. And when they are not griping, we are in trouble. But if we agree with them that egg prices have gone to hell and are never coming back, we certainly don't set the stage for successful sales presentation. We are doing it all the time. . . . We must set the stage so that we can show that our product or services will help that farmer be more successful.

All of us strive for success. I've never asked a farmer yet, "Do you want to make more money?" and had one say "No." And I don't expect to have one say "No." . . .

To be a success, you must think deeply, laugh often, work hard, give freely, pay promptly, pray earnestly and be kind. Good sales management and sales training is working for us. It will help you get your sales job done.

Egg Quality School Held at Amherst

AMHERST, MASS. — Seventy-nine students from 19 states, Panama, Greece, and Canada learned the techniques of producing, maintaining and measuring egg quality at the Egg Quality School of the Northeastern Poultry Producers Council, held here.

The four-day training course stressed the practical side of egg quality and its determination. Special films on the newest developments in automatic egg handling and grading machinery were shown. Some of the equipment was demonstrated at the school.

Many of the students were professional candlers, graders and marketing officials. Even breeders attended to get a better view of the egg quality goals that are a part of their genetic programs.

This was the 28th school sponsored by NEPPCO. Joining with the council and the university in the sponsorship of the school were the Massachusetts and U.S. Departments of Agriculture.

NOW! You can get immediate delivery of the NEW KLOTOGEN F PREMIX for use in poultry feeds. This NEW PREMIX is even more stable than before. It's cheaper per gram of vitamin K used. It's bagged in smaller lots for easier handling and storage. And it is the most active, effective synthetic vitamin K available.

Improved Stability is the result of continuing Abbott research with KLOTOGEN F (Abbott's stabilized menadione sodium bisulfite). A higher quality, compatible, nutritive carrier—Soybean Oil Meal—adds to the stability of the Premix and improves its "mixability."

Lower-cost vitamin K results from a higher concentration. You'll get 16 grams of KLOTOGEN F in every pound of the NEW PREMIX—four times more than before. As a result, you'll save ¾¢ or more on every gram of actual KLOTOGEN F you use in poultry feed.

Easier to Handle because NEW KLOTOGEN F PREMIX is shipped to you in a 50-lb., moisture-proof, multi-wall bag.

Suggested levels of KLOTOGEN F remains the same—1 to 4 grams per ton of finished feed. In stress conditions, (for example, in presence of Coccidiosis, CRD, Enteritis, Fowl Typhoid, or in vaccination or medication of a flock) the recommended level of KLOTOGEN F is 2-4 grams per ton of finished feed.

EN F®
PREMIX!

NEW KLOTOGEN F PREMIX
is available now from these branches:
Atlanta • Baltimore • Boston
Dallas • Kansas City • Memphis
Minneapolis • San Francisco
and from main plant in North Chicago

NEW
KLOTOGEN F
PREMIX
a product of ABBOTT LABORATORIES
Chemical Marketing Div., North Chicago, Ill.

906535

Putting Research To Work

BY SPENCER H. MORRISON, PH.D., D. V. M.

Random Thoughts on Some of the Papers Presented at the 54th Annual Meeting of the American Dairy Science Assn.

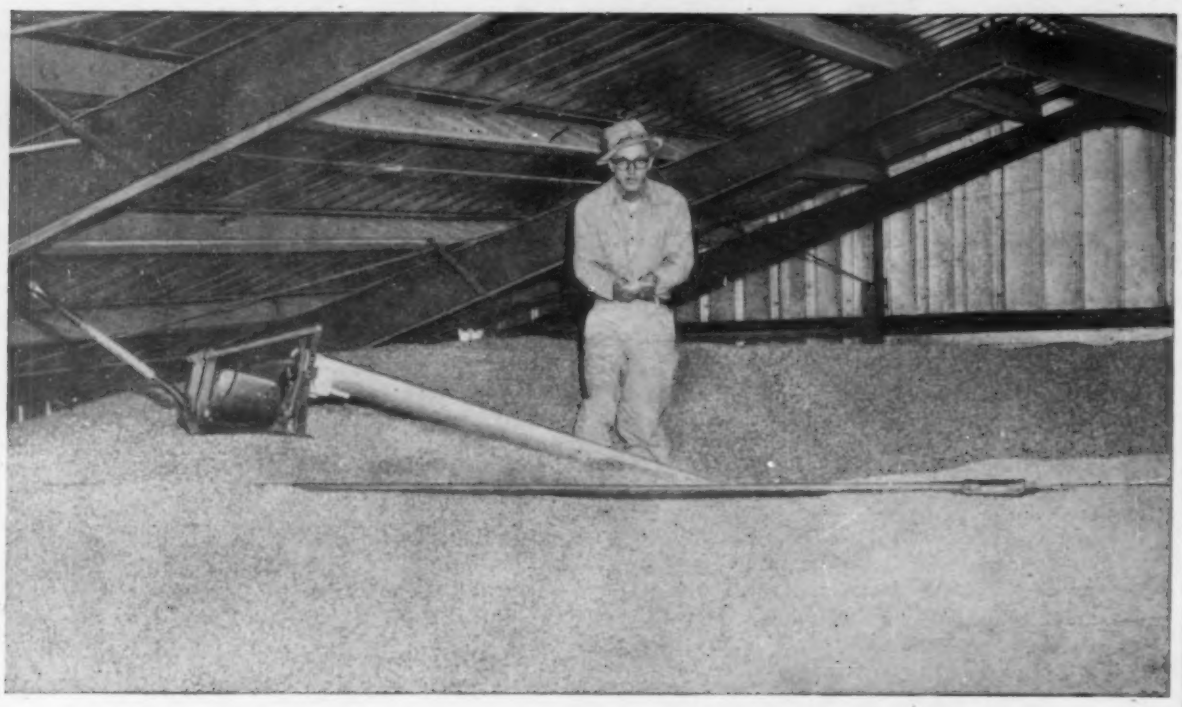
Part II

7. Clark and Whiting of Alberta—showed that Holstein heifer calves fed on a constant daily amount of 8 lb. whole milk until four weeks old made as rapid growth as those fed at the 10% of body weight level. Furthermore, calves weaned abruptly at four weeks of age gained as rapidly as calves receiving the same total quantity of milk but weaned gradually.

The use of only 6 lb. of milk daily until four weeks of age produced as good results as when 8 lb. of milk daily was fed until four weeks of age, or when 6 lb. daily was fed until eight weeks of age.

Confirming many other reports, these workers likewise observed no response from cud inoculations taken from mature calves. Calves which received cud transplants received the first one at one week of age, and twice weekly thereafter until four weeks old. An all-plant protein (21% protein) in pelleted form was fed to all calves until 16 weeks old, with consumption limited to a maximum of 4 lb. per head daily. Good quality alfalfa hay was supplied ad lib. After 16 weeks of age the calves were handled in groups and placed on pasture in summer or on good alfalfa hay in the winter, receiving in addition 4 lb. daily of a concentrate containing approximately 14.25% protein.

On the basis of this work we may be safe to recommend a more simple program to calf feeders than that advised in most current texts on the subject. Personally, I would like to see a little more work on this interesting aspect of calf management before making a flat-footed, all-inclusive recommendation. For example, do Jerseys, and especially Guernseys, respond in the same manner? It is my guess, based on personal experience, that Guernseys may need a careful weaning program—but without much scientific basis for making the statement!



8. USDA, Purdue, and South Dakota—papers discussed losses in silage. Although many factors affect silage losses in all types of silos—such as air-tightness of silos, surface exposed while feeding, depth of stored silage, type and moisture content of crops—probably the single most important factor in obtaining good silage is exclusion of air. If air is excluded properly, such as by the use of intact plastic seals, there is no necessity of packing silage in the opinion of several of these investigators.

According to the South Dakota work, oats are best ensiled in the soft dough stage rather than in the early milk stage. This is somewhat contrary to some other reports on this subject. Previous studies have not usually considered dry matter losses to the same extent as those by the South Dakota workers.

9. Rusoff and associates of Louisiana—demonstrated that 10 gm. of bacitracin added per ton of green material preserved White Dutch clover silage as well as the addition of 80 lb. of molasses per ton of green material, or 8 lb. of sodium metabisulfite per ton of green material.

The cost of the bacitracin was much cheaper than the other two additives—an important consideration. Also, bacitracin silage was apparently slightly more efficient in milk producing ability based on a 63-day reversal trial with 12 lactating cows—a point which needs further substantiation in my opinion. It was also reported that 5 gm. ton of green material of bacitracin may be just as satisfactory as the 10 gm. ton level. The material is expected to be marketed under the commercial name of Siloferm by Commercial Solvents in a premix form so that 10 lb. of material will furnish 5 gm. of bacitracin. Price of premix was not disclosed.

10. Thomas and associates of USDA—reported on a further extension of studies evaluating the feasibility of wilted alfalfa silage forming the roughage part of growing dairy heifer rations. Confirming their previous reported results, wilted alfalfa silage was much less satis-

Butler flat storage may cost a few cents a bushel more...

BUT IT'S WORTH MORE! Before you invest in "bargain" grain storage buildings stop and think of your investment in grain versus the risk in the building. Take a 100,000-bushel building full of corn at $1.25 a bushel, for example. The building is protecting an investment of $125,000 in grain.

But a leaky roof could bring that grain down to sample grade, and cost you half your investment – that's far more than you actually paid for the building itself.

Losing only a couple of carloads (3,600 bushels) could cost as much as $4,500. And in a 100,000-bushel building, it figures out to 4½¢ a bushel.

Why gamble your grain investment in "bargain" storage? Butler, the safest flat storage may cost only a few pennies a bushel more. Why is Butler the safest storage?

First, Butler buildings have been engineered by experts—men who have been in the grain storage business longer than most . . . know it better.

Second, Butler buildings are made better. The rigid frames that give the building strength are precision made from specification steel. That's steel of consistently high quality . . . steel that meets high standards of strength. Then too, Butler roof and wall panels are die formed with a special corrugation that not only makes them stronger . . . but assures a perfectly weathertight fit. Besides this, Butler uses Panlastic,® a special weatherproofing compound, that prevents water seepage due to capillary action.

And, Butler doesn't skimp or leave out many of the little, but important details that give a grain storage building extra strength . . . extra weather-tightness.

Before you invest in flat grain storage, contact your nearby Butler Builder. He'll be glad to show you why Butler flat storage is the lowest-cost safe storage in the long run. Or write direct.

BUTLER

BUTLER MANUFACTURING COMPANY

7402 East 13th Street, Kansas City 26, Missouri

Manufacturers of Metal Buildings • Equipment for Farming, Oil Production and Transportation, Outdoor Advertising • Contract Manufacturing

Sales offices in Los Angeles and Richmond, Calif. Houston, Tex. • Birmingham, Ala. • Kansas City, Mo. Minneapolis, Minn. • Chicago, Ill. • Detroit, Mich. Cleveland, Ohio • Pittsburgh, Pa. • New York City and Syracuse, N.Y. • Boston, Mass. • Washington, D.C. Burlington, Ontario, Canada

MAKES THE DIFFERENCE

P.T.

Personal Touch service by

Amburgo

Authorized East Coast Distributors

MYVAMIX—D.P.I.

and other leading feed additives, minerals and antibiotics

THE AMBURGO CO., INC.

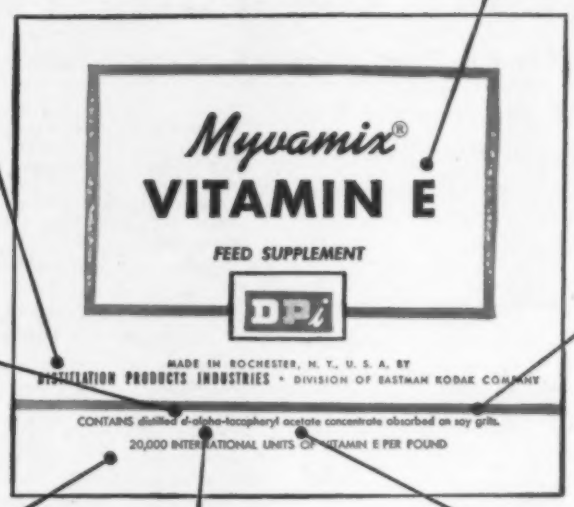
Gen. Offices: 1315 Walnut St., Philadelphia 7

Hope, Indiana Fresno, California

For information or a quotation on *Myvamix Vitamin E Feed Supplement*, write ***Distillation Products Industries,*** Rochester 3, N. Y. Sales offices: New York and Chicago • Charles Albert Smith Limited, Montreal and Toronto • Or, contact the distributor nearest you.

Vitamin E is considered by many authorities to be an essential part of a nutritionally complete diet for chickens, turkeys, dogs, and other animals. We will be happy to send literature references on request.

The "d" means the vitamin E in *Myvamix Vitamin E Feed Supplement* is the same stereoisomer that appears in nature. 1 milligram of *d*-alpha-tocopheryl acetate is equivalent to 1.36 International Units of Vitamin E.


Myvamix®
VITAMIN E
FEED SUPPLEMENT
DPi
MADE IN ROCHESTER, N. Y., U. S. A. BY
DISTILLATION PRODUCTS INDUSTRIES • DIVISION OF EASTMAN KODAK COMPANY
CONTAINS distilled d-alpha-tocopheryl acetate concentrate absorbed on soy grits.
20,000 INTERNATIONAL UNITS OF VITAMIN E PER POUND

The vitamin E in *Myvamix* is on a dry, non-dusting soy grits base. We use grits instead of meal because they have less fiber, less moisture, more protein, more uniform particle size, and are dusted to remove hulls and powder. All this means a higher quality product, one that's as easy to handle as anything in your mill.

With *Myvamix*, you know exactly how much vitamin E is in your feed. There's a sure 20,000 International Units of Vitamin E per pound. The cost is only a few dimes per ton of feed.

There are at least seven tocopherols which have some vitamin E activity. The most effective biologically is "alpha." That's what is in *Myvamix Vitamin E Feed Supplement*. (Only 10 to 15% of the tocopherols in corn is "alpha"—the rest is "gamma," one of the least effective of all.)

The "acetate" means that the vitamin E in *Myvamix* is really stable. Tests show no loss of potency even after storage in finished feeds for six months at 100 F. The full potency you put in the feed is there when the feed is fed.

factory for growing dairy heifers. The current work, however, did show that such wilted alfalfa silage may be the roughage for as long as seven months during the growing-out period for dairy heifers, provided that more adequate rations are fed either before or after the use of wilted alfalfa silage. Such heifers, however, may be slightly smaller at two years of age than those fed alfalfa hay throughout the two-year period.

11. Owen, Kulken and Webster of Nebraska—discovered that a male sterile hybrid forage sorghum (RS 303F) with few seeds was approximately equal in milk producing value to a standard forage sorghum, Axtell, in a double reversal experiment involving 12 Jersey cows. Furthermore, fat-corrected milk production and silage intake were slightly greater for the same cows when fed corn silage than when fed either of the sorghum silages. Although the responses from corn silage were small, they were large enough to show significance at the 1% level of probability. This work is further confirmation of the slight superiority for milk production of corn silage over sorghum silage and also suggests that in the case of sterile sorghum hybrid the nutrients which would normally be stored in the seed were diverted to storage in other parts of the sterile plant.

12. Hawkins of Alabama Polytech—used 18 cows in a 28-day split plot experiment to investigate the effects of: (1) regular herd mix (conventional ingredients) compared with (2) 29.1% dextrin and 70.9% conventional ingredients or (3) 9.7% Na propionate and 90.3% conventional ingredients, all so fed as to bring the nutrient intakes to 110% of the recommended allowance.

During the experimental period, alfalfa, coastal Bermudagrass or Johnsongrass hays were fed in addition to the experimental rations. All cows fed propionate containing concentrate consumed much less hay than the other groups, but this low hay consumption was also apparent with the cows during the standardization period and was not therefore considered to be a true dietary response (possibly subject to question—S.H.M.). Although cows fed the coastal Bermudagass hay as roughage produced about 8% less actual milk, the production of 4% fat-corrected milk was similar for all hays tested.

Milk production, either actual or fat-corrected, was unaffected by the experimental dextrin or Na propionate containing diets. However, it should be noted that the cows fed dextrin and Na propionate containing concentrate produced significantly less butterfat than cows fed the herd mix concentrate, while at the same time causing the cows to gain more weight in comparison to the herd-mix fed cows. This indicates that the dextrin and Na propionate influence the fat metabolism of the milking cow.

13. Pennsylvania and Rutgers stations—studied the feeding value of Orchardgrass hay. The Pennsylvania work again reemphasizes the importance of harvesting grasses, such as Orchardgrass, early. It was rather interesting to observe from the Pennsylvania work that even when 300 lb. of actual nitrogen was applied per acre there was no nitrate toxicity noticed. Practical farmers and other researchers have noted some evidence of this with even less nitrogen than used in the trial.

It should be noted that the Pennsylvania men also noticed a tendency for some decrease in palatability with high levels of nitrogen. In the digestibility trials conducted with sheep it was found that the 16-day interval between first and third harvests resulted in maximum declines of 17.2% of digestible dry matter, 19.8% of digestible crude protein, and 18.1% of digestible energy. The 200 and 300 lb. levels of actual nitrogen increased the digestible energy and dry matter values slightly over the 50 and 100 lb. levels of nitrogen, and materially increased the digestible protein levels.

The New Jersey work showed production is fully equal if not slightly better when 200 lb. of nitrogen is applied per acre to Orchardgass in comparison with alfalfa hay. Limited amounts of silage were fed to all cows, and cows on Orchardgrass gained slightly more in weight.

Advertisement

If You Want Positive Control of Newcastle Disease on Your Farm

Invest 5 Minutes of Your Time in Carefully Reading This Bulletin

This Small Investment in Time We Ask You to Make May Well Prove to be the Best and Wisest One You Ever Made in Connection With Your Poultry Operations

HERE is plain logic or common sense—read this bulletin carefully and see if you do not agree with us.

Every breeder knows full well that he has several dollars invested in a bird at bloodtesting or housing time. That being the case, then we ask—

Dr. Tevis M. Goldhaft

Isn't it worth an *additional fraction* of a penny more to surely protect that bird against Newcastle Disease?

The fraction of a penny we speak of represents the slight difference in cost of a bottle of VIPOL 717 INTRAMUSCULAR Live Virus Newcastle Disease Vaccine over vaccines for application by any other method.

Using the VIPOL Syringe, specially designed for this purpose, more birds can be vaccinated by the INTRAMUSCULAR Method in a given time than by the Intranasal, Intraocular or Wing-web methods with surer results.

Intramuscular Vaccination Has the Following Great Advantages

1. A 500 dose bottle of VIPOL 717 (LaSota Strain) Newcastle Disease Vaccine contains 100 mg. of live virus—double the amount of live virus contained in a 500 dose bottle of Intranasal, Intraocular or Water Vaccine.

2. Even more important than the amount of virus is the positive assurance that every bird receives a measured and full dose of virus when vaccinated by the INTRAMUSCULAR Method. No such assurance can be had when birds are vaccinated Intranasally, Intraocularly, Wing-web or by any mass method.

Breeders Vaccinated Intramuscularly at Housing Time Key to Control of Newcastle

Incidents of Newcastle Disease can be greatly diminished and, as a matter of fact, put under complete control by vaccinating all breeding stock and replacement pullets Intramuscularly at bloodtesting or housing time with VIPOL 717 (LaSota Strain) Live Virus Newcastle Disease Vaccine, using the VIPOL Syringe specially designed for this purpose. Every bird thus vaccinated will receive a measured and full dose of vaccine. Birds vaccinated INTRAMUSCULARLY with VIPOL 717 (LaSota Strain) Live Virus Newcastle Disease Vaccine transmit a high degree of immunity to their offspring, thus obviating the necessity for vaccinating baby chicks before they are 10 to 14 days of age.

Better and More Durable Immunity

Since it is an established scientific fact that the older the bird is at time of vaccination, the better and more durable is the immunity, then, obviously, chicks produced from breeders which have been vaccinated at bloodtesting or housing time will be protected by parental immunity until they are 10 to 14 days of age. Such chicks, if vaccinated at 10 to 14 days of age, are old enough to get the full benefit of the vaccine. Danger of chicks produced by breeders vaccinated INTRAMUSCULARLY with VIPOL 717 at housing time coming down with Newcastle Disease during the first week of their lives is rare.

Why Vipol 717 Is Most Effective

It has been definitely established that VIPOL 717 (LaSota Strain) Newcastle Disease Vaccine induces a significantly higher serological immune response than the B-1 Strain and consequently a more durable immunity. This is a most *vital factor* to consider if the vaccination method you choose for the first vaccination is intranasal or intraocular. If your choice is the drinking water method, then VIPOL 717 (LaSota Strain) is the vaccine that will give your birds the best protection. This is a bold statement but, nevertheless, true. Tens of thousands of poultrymen can attest to the truth of our claim.

Pathologists Prove Superiority

Scientific studies conducted by poultry pathologists at a leading university clearly pointed out in their published report, that in laboratory trials VIPOL 717 (LaSota Strain) Newcastle Disease Live Virus induced a significantly higher serological immune response than the B-1 Strain. The researchers further reported that replacement flocks vaccinated with the VIPOL 717 (LaSota Strain), while carrying residual immunity from early primary vaccination with the B-1 strain, showed an excellent rise in antibody titer without manifesting obvious clinical respiratory signs. This is a clear indication of the great *immunizing* quality of VIPOL 717 (LaSota Strain).

The VIPOL 717 (LaSota Strain) retains its power to immunize for a period as long as 24 hours and more after it has been added to poultry drinking water. Because of the original high titer of the virus in the vaccine itself, it can stand dilution in the drinking water well beyond recommended levels. The VIPOL 717 (LaSota Strain) has unlimited infecting potential that continues through the vaccine reaction period and insures the immunity of a maximum number of susceptible birds.

Intramuscular Vaccination with Vipol 717 (LaSota Strain) Newcastle Disease Vaccine Gives Complete Protection Through Entire Production Period

Thus far we have shown you how to fully protect your breeders by vaccinating INTRAMUSCULARLY with VIPOL 717 (LaSota Strain) Newcastle Disease Vaccine and how this step will protect baby chicks produced by these breeders until they are at least 10 to 14 days of age. The offspring should be given their first Newcastle Disease vaccination with VIPOL 717 (LaSota Strain) Newcastle Disease Vaccine at that time. If done INTRAMUSCULARLY, one application will protect them until housing time. If done by the Drinking Water Mass Method, two applications are recommended—the first application at 10 days of age followed with the second application when the birds are 4 weeks of age. The one INTRAMUSCULAR vaccination or the two vaccinations by the Drinking Water Method will protect the offspring to bloodtesting or housing time. To further protect these birds through their entire production period, we strongly recommend that they be revaccinated INTRAMUSCULARLY with VIPOL 717 (LaSota Strain) Newcastle Disease Vaccine at bloodtesting or housing time.

Replacement pullets vaccinated at housing time by the INTRAMUSCULAR METHOD with VIPOL 717 (LaSota Strain) Newcastle Disease Vaccine will likewise be protected through the production period. Re-vaccination of birds already in production may be done with complete confidence and with no harmful effect.

The adoption of this vaccinating program will go a long way toward controlling Newcastle Disease on any breeding farm. We venture to predict that, should our recommendation be put into effect on every breeding farm in the country, incidents of Newcastle Disease would soon become a rarity.

For your supply of VIPOL 717, or for more information, contact your nearest dealer or Vineland state distributor, or write to Vineland Poultry Laboratories, Vineland, N. J., or 4068 Broadway Place, Los Angeles 37, Calif.

VINELAND POULTRY LABORATORIES

Tevis M. Goldhaft

Tevis M. Goldhaft, D. V. M.
General Manager

Advertisement

Ralston Purina Co. to Open Feed Plant

OTTUMWA, IOWA—Ralston Purina Co. will hold the formal opening of its new Ottumwa feed plant Sept. 19, announced John Renth, newly appointed manager.

Mr. Renth, a native of St. Louis, came to Ottumwa from Iowa Falls where he had been Ralston Purina plant credit manager for 2½ years.

Tom Henkle will be the plant superintendent. He came to Ottumwa from the Ralston Purina plant at Circleville, Ohio, where he was plant foreman. He has a degree in agricultural engineering from the Virginia Polytechnic Institute.

Mr. Renth said arrangements are being made for the opening to handle and feed 8,000 to 10,000 persons at the new plant. Ralston Purina dealers in southeast Iowa and 14 northeast Missouri counties will hand out admission tickets to their customers.

Attending from St. Louis will be a group of company executives headed by board chairman Donald Danforth; R. E. Rowland, Ralston Purina president, and L. B. Stuart, executive vice president.

New Department Head

LINCOLN, NEB.—Dr. Robert M. Koch has been promoted to professor and chairman of the University of Nebraska's department of animal husbandry, it was announced by the board of regents.

Dr. Koch succeeds Prof. William J. Loeffel, who has reached the age limit for administrative duties, but will remain on the staff as professor. Dr. Koch joined the university in 1950.

VITAMINS
PRECISION BUILT FOR PRECISION NEEDS
VITINC
VITAMINS, INC.

BASIC MATERIAL MANUFACTURERS
and HEADQUARTERS FOR
TECHNICAL INFORMATION
Write or Wire Your Requirements
VITAMINS, INC.
800 W. 58th Street, Chicago 21, Ill.

THERE'S A SURE WAY TO FIND OUT WHAT DRESSPRINT COTTON BAGS WOMEN REALLY WANT. . .

AND WE TOOK IT

Selecting cotton print patterns that women will like and buy is a must for the bag business and the milling business. We have always tried hard to do this (and with moderate success). We had expert fashion guidance . . . and years of experience. We had well-considered opinions from you. But, frankly, it was largely guesswork . . . and hope. And guessing is not good enough.

So, we took the sure way. We learned from women who actually use cotton bags for home sewing.

The survey was made by a research organization with access to a nation-wide panel of typical homemakers, including farm women. (The women did not know Bemis sponsored the study.)

We learned what types of florals, plaids, checks, geometrics, etc., are currently popular.* What colors. What color combinations. We learned that women who sew prefer fewer *different* patterns and more bags of the same pattern. We learned how much they sew . . . and what they make from emptied cotton bags (an important guide to us). We learned that dressprint bags can influence the sale of your products.

It was probably the largest, most thorough study of its kind ever made by the bag business.

But what does it mean?

Principally, it means that Bemis will concentrate on the prints your customers really want . . . and you will get the sales benefit of proved-popular bags.

Bemis

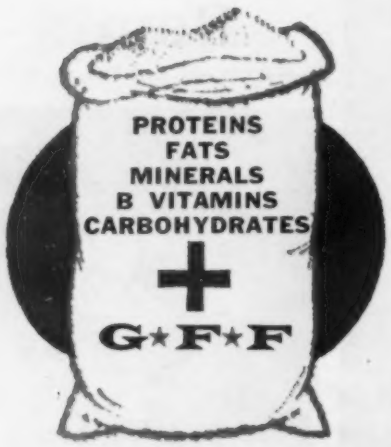
General Offices—408 Pine St., St. Louis 2

***HERE'S WHAT THEY LIKED . . .**
Popular and style-right Bemis patterns include: Bemis Designer Prints, "Sparklin" pinstripes, and Sandman "Goldilock" pillowcase bags.

Call your Bemis man today.

ONLY the BEST

...for a chick like you!



NO DOUBT she's impressed by his good judgement! And why not? Just the addition of Distillers Feeds added to poultry rations supply all of the important growth and health ingredients. Besides being rich in *proteins, minerals and B-vitamins,* Distillers Feeds contain GFF★a naturally produced grain fermentation factor—found *only* in Distillers Feeds. Utilize this big Plus and increase the growth power of your poultry rations by including Distillers Feeds with GFF!

DISTILLERS' FEED RESEARCH COUNCIL

★ **GRAIN FERMENTATION FACTORS:**

unknown growth factors found exclusively in Distillers Feeds.

Write for Booklet, "Feed Formulations with Distillers Feeds". It's FREE!

DISTILLERS FEED RESEARCH COUNCIL

1232 Enquirer Building, Cincinnati, Ohio

James B. Beam Distilling Co., 65 East South Water St., Chicago 1, Ill. * Brown-Forman Distillers Corp., P. O. Box 1080, Louisville, Ky. * Double Springs Distillers, Inc., 70 Scollay Square, Boston 8, Mass. * Fleischmann Distilling Corp., 625 Madison Ave., New York 22, N. Y. * Glenmore Distilleries Co., P. O. Box 900, Louisville, Ky. * Grain Processing Corp., 1600 Oregon St., Muscatine, Iowa * Kentucky River Distillery, Inc., Brook & Eastern Parkway, Louisville 8, Ky. * Medley Distilling Co., P. O. Box 548, Owensboro, Kentucky.

★ * * * Merchants Distilling Corp., 1 North La Salle St., Chicago, Ill. * Midwest Solvents Co., Inc., 1300 Main St., Atchison, Kan. * Mr. Boston Distiller, Inc., 1010 Massachusetts Ave., Boston 18, Mass. * National Distillers Products Co., Grain Products Sales, 99 Park Ave., New York 16, N. Y. * Schenley Distillers, Inc., 26 E. Sixth St., Cincinnati 2, Ohio * Joseph E. Seagram & Sons, Inc., Grain Products Division, 375 Park Avenue, New York 22, N. Y. * Stitzel-Weller Distillery, Inc., Sta. D, Louisville, Ky. * Hiram Walker & Sons, Inc., Peoria 1, Ill.

Canada Experts Advise Restricted Feeding For Poultry Flock

HARROW, ONTARIO—Eggs from early maturing, full fed pullets are usually small and sometimes the increase in size is discouragingly slow, says the Canada Department of Agriculture.

Experiments at the Harrow, Ont., federal research station, have shown that restricted feeding results in fewer small eggs, increased production and lower laying house mortality.

A 20% feed reduction is recommended by the Canada Department of Agriculture. More than this can be dangerous unless poultrymen pay extra attention to the birds, department officials say.

They say one pitfall is that most chick feeds contain drugs to control coccidiosis and to reduce feed means to cut down protection. The pullets should receive extra feed in times of added stress, such as sickness, change of housing or vaccination.

Young chicks on a restricted diet need extra warmth, according to the Canadian officials. They tend to huddle otherwise, and this has a weakening effect. Hoppers should be plentiful enough so that every bird can feed at one time, say the officials. A better distribution is effected if there are two feedings daily. Pastures should be mowed frequently to supply a succulent supplement to the restricted diet.

When the pullets are housed, feed should be restored gradually, according to the Canadian officials. Pendulous crops, thought to be caused by birds gorging themselves, are sometimes seen, they say. While the pullets may be disappointing in appearance, it takes only two weeks or so on full feed and under good laying house management for all birds to reach a mature, ready-to-lay state.

To Study Infestation Of Grain in Mexico

MANHATTAN, KANSAS — Prof. Donald A. Wilbur, Kansas State University entomologist, will spend the coming year working on insect infestation of stored grain in Mexico under a temporary appointment to the Mexican staff of the Rockefeller Foundation.

Donald Wilbur

Prof. Wilbur will be headquartered in Mexico City, but will be studying stored grain insect problems over the entire Republic of Mexico.

He explained that the work will provide an opportunity to delve into the effects of different geographical locations on stored grain entomology because of the wide variance of the terrain. Mexico currently is performing a great deal of basic research in an attempt to control insect and disease loss of crops.

JUST THINK . . .

1 only

SHELL OUT

$5.00 a year* to keep abreast of the rapidly changing Feed Industry.

*Less than 10 cents per week for 52 issues of . . .

FEEDSTUFFS

Record Feed Shipments Reported in Canada

WINNIPEG — Shipments of all types of stock and poultry feeds in Canada were greater in April, and January to April, this year than last, it was reported by the Dominion Bureau of Statistics.

April shipments included primary or concentrated feeds, 39,906 tons (32,141 a year earlier); secondary or complete feeds, 228,047 tons (189,090), and all "other" animal feeds, 46,141 tons (40,105). January-April totals were: primary feeds, 156,316 tons (137,817 a year ago); secondary feeds, 867,592 tons (752,369), and all "other" animal feeds, 180,599 tons (163,573).

NEW POULTRY FIRM

CLAXTON, GA. — The Claxton Poultry Co. recently opened here with a beginning production of 5,000 head of chickens processed per day.

THE MIXER THAT MEETS EVERY MIXING REQUIREMENT... THE Marion MIXER

WITH Exclusive MIXING AND BLENDING ACTION

MIXES DRY MATERIALS:
- Feeds
- Minerals & Vitamins
- Fertilizers, etc.

BLENDS DRY MATERIALS with LIQUID ADDITIVES:
- Molasses
- Fish Solubles
- Animal Fats, etc.

Absolute accuracy is assured through the exclusive Marion cross blending and mixing action. Even trace materials can be thoroughly and completely blended into your product. A constant uniformity, guaranteed---

Bag after Bag after Bag!

RAPIDS MACHINERY COMPANY
987 11th Street Marion, Iowa

SEND TODAY FOR FREE DESCRIPTIVE LITERATURE

NOW! BIGGER PROFITS... MORE REPEAT SALES!

NEW Blatchford's FIN'N FEATHER Picture Story SELLS DOG-RATION FAST...Steps up Repeat Sales

SELL MORE...Earn More with Blatchford's DOG-RATION

Blatchford's new complete picture story on nationally famous Fin'N Feather Club Kennel operations means more new dog food customers . . . more repeat sales for you. In it, trainers Ed Carey and "Uncle Willie" Miller tell why they feed their top flight hunting dogs nothing but Blatchford's. Use Blatchford's new Fin'N Feather Dog-Ration sales aids to step up your dog food profits now!

Free Feeding Samples Build Sales

Order Free Dog-Ration samples, too! When dog owners compare dog food quality, results and savings . . . they buy Blatchford's.

Blatchford's ESTABLISHED IN 1900

MAIN PLANT AND OFFICES
WAUKEGAN, ILL.

Midwest Division—Des Moines, Iowa • West Coast Division—Nampa, Idaho

WRITE TODAY...For NEW Fin'N Feather Wall Display,

complete picture story brochure and mailers. Shows your customers why Dog-Ration is today's best buy!

Blatchford Calf Meal Co. Dept. 279 Mail Today!
Waukegan, Ill.

YES Send me the following new SALES AIDS
- ☐ New Dog-Ration Fin'N Feather Wall Display
- ☐ New Fin'N Feather Picture Story Brochures
- ☐ New Dog Ration Feeding Samples

NAME_____
FIRM_____
ADDRESS_____
CITY_____ STATE_____

U.S. Fish Farming Said To Have Potential In Rice Areas

NEW YORK—Fish farming could have great possibilities in rice growing areas of the U.S., according to Dr. Shao-Wen Ling, a world authority on fish culture. Dr. Ling, who was assigned to the U.S. Fish and Wildlife Service for three months, has been advising on the establishment of a research station in Arkansas to investigate fish farming problems in the U.S.

He says for successful and profitable fish farming a suitable combination of fish needs to be worked out which would have complementary food habits so that some would live on aquatic weeds, some on the minute organisms in the water and others off the sediment on the bottom. Thus they would utilize fully all the nutritional substances found in the pool and grow to edible size without eating one another, he adds.

Research is needed to determine kinds and quantities of fertilizers that should be added to the ponds to encourage the production of fish food, according to Dr. Ling. What supplementary foods, like corn and soybean products, should be added to round out the range of nutrients available to the fish, also needs research, he adds.

Dr. Ling says a big problem is how to induce fish to spawn in captivity. "In their wild state they only spawn when they are happy," he explains. "Our problem is how to make them happy in captivity. We might have to feed them special vitamins, make sure they get their calories and even give them hormone injections to make them more peppy."

The Soil Conservation Service in Arkansas has calculated that more than half a million acres in rice growing areas would be suitable for the industry, according to Dr. Ling. Dr. Ling says he met many farmers during a six week field trip who were ready to invest heavily in the industry when it was put on a scientific basis.

Magnesium Symposium To Be Held at West Virginia University

MORGANTOWN, W. Va.—Principal consideration will be given to various aspects of hypomagnesemia in the ruminant during the "Symposium on Magnesium in Agriculture" at West Virginia University here Sept. 3-4, according to Dr. G. C. Anderson, head, department of animal husbandry.

"It is hoped," he said, "that this symposium will do much toward clarifying the approach to the problem of hypomagnesemia and hasten the discovery of an answer to it."

Dr. Anderson explained that hypomagnesemia, commonly called "grass tetany" or "grass staggers," represents a serious problem in many areas in the Northeast, and the wheat pasture area of the Southwest and in other parts of the U.S.

"Research work conducted strongly suggests that this condition may be due to a mineral imbalance," Dr. Anderson noted. "In this respect, phosphorus, manganese, calcium, iron and copper have been implicated directly or indirectly. The nitrates and energy insufficiency have also been suggested as possible contributing factors."

A number of university and government agricultural researchers have been invited to make presentations at the symposium. Topics which will be discussed include: Geographic and zonal distribution and availability of magnesium in soils, magnesium as a fertilizer element, role of magnesium in plant and animal tissues, problems of magnesium assay, magnesium in poultry and non-ruminant mammals, effect of Mg and Ca upon efficacy of antibiotics in poultry and magnesium in ruminants.

The symposium is to be held in the West Virginia University Medical Center Auditorium at Morgantown.

New Hampshire Boosts Feed Registration Fees

CONCORD, N.H. — Feed registration fees have been increased in New Hampshire, announced Perley I. Fitts, commissioner of Agriculture. The increase is in line with new regulations recently approved by the New Hampshire Legislature at the suggestion of Gov. Wesley Powell.

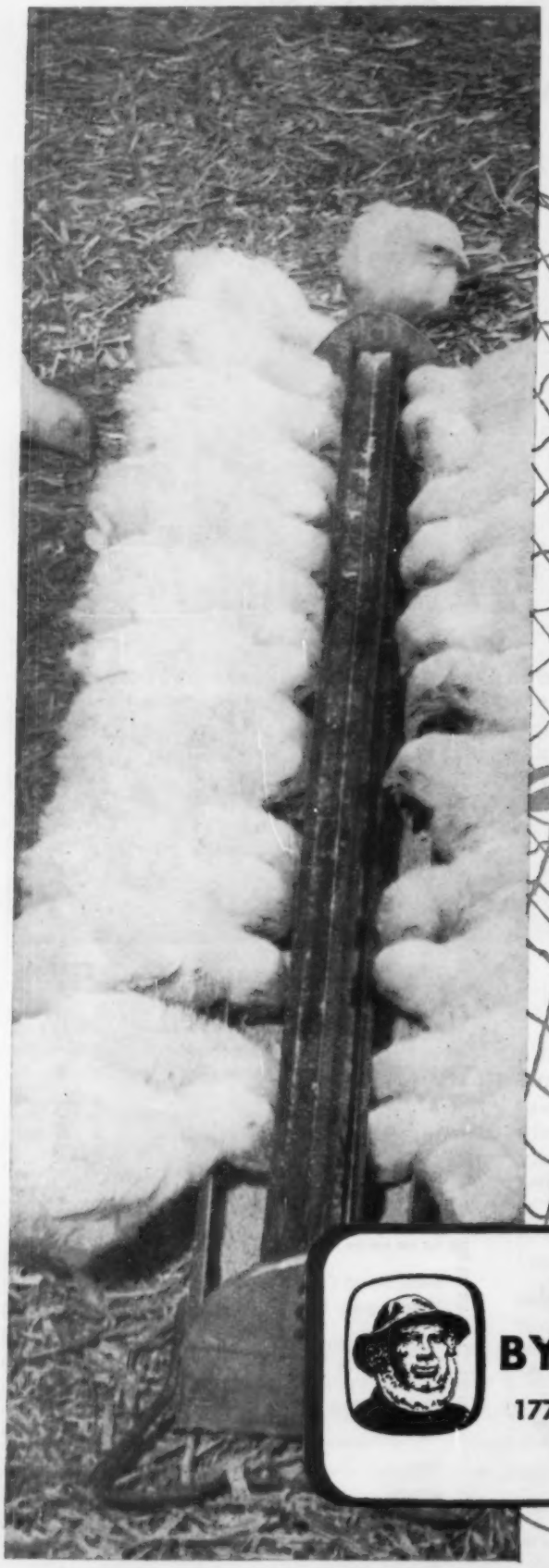
The rates have been increased from $15 to $20. Mr. Fitts said his department had suggested $25. The increase is expected to boost the department's revenue for registration of feeds, taking samples and testing, by some $8,000. The money will help meet the soaring costs of administering these services.

The registration fee for fertilizers has also been increased, and is now $10 per unit, all units. The old charge was $10 per unit, but not over $25 in total for any formula. Now it is $10 each for the nitrogen, phosphorus, potash and magnesium oxide. The higher fee is expected to increase the department's revenue by about $4,000.

Turkey Plant Opened

WINNIPEG — A turkey processing plant at Lac du Bonnet, Manitoba, has been opened. The owner of the $600,000 plant is Fred H. Gauer, a member of the Winnipeg Grain Exchange, president of the Gauer Grain Co. and Newcombe Investments, Ltd.

The plant, known as Lakeview Turkeys, Ltd., is capable of handling birds at the rate of 1,800 an hour and will begin regular processing operations later this summer. The enterprise features all-steel buildings, automatic feeding and watering systems and hatchery. It is hoped that, providing sufficient demand is found, the entire production of the plant will be turned over to quarter turkey roasts.



Increase your feed profit 3 ways

1 Stop stocking so many feed ingredients — you'll save space (to say nothing of mixing time!) . . .

2 Stop investing so much capital in inventory — you'll save money . . .

3 Improve the performance of your feed — you'll sell more of it!

YOU GET ALL THESE BENEFITS WITH GORTON'S BLENDS

With ocean-fresh Redfish meal, condensed Redfish solubles (both processed from edible fish) and other superior ingredients Gorton's Blends supply *all* the essential vitamins, amino acids, antibiotics, and unidentified growth factors your feeds should have — *all* in one bag for easy and accurate mixing.

There are Gorton *fish-based* Blends for broilers, layers, hogs, and turkeys. Now you can be *sure* of the uniform high quality of every feed you mix, and you'll pay less in the bargain! Write today for our folder on Gorton's Blends, and ask about New Englander Vitalizer, the great feed additive for dairy herds, beef cattle, and sheep.

NEW ENGLAND BY-PRODUCTS CORP.

177 MILK STREET, BOSTON 9, MASS.

PHONE HUbbard 2-1682

"If Gooch recommends a feeding program they've proved it works. As a dealer, knowing my customers will get results helps me sell feed."

GOOCH'S BEST

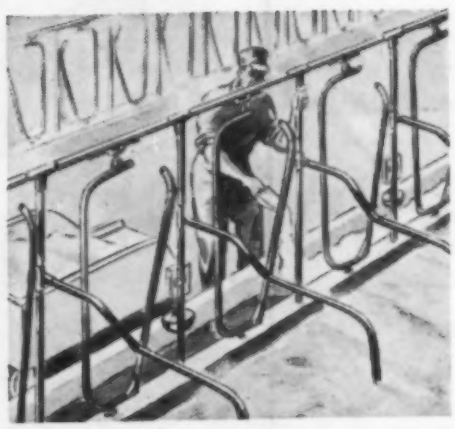
Lincoln, Neb. Salina, Kan.
Vicksburg, Miss. Dalhart, Tex.
Council Bluffs, Iowa

Farm and Feed Salt NEWS

FROM INTERNATIONAL SALT COMPANY, INC.

Sterling Blusalt can make hot-weather feeds more productive

Animals often eat less when the weather is hot and humid. Hence it's particularly important that the feed they do eat is easy to digest and supplies all needed nutrients. You can be sure your feeds will have both the salt that helps digestion and seven minerals vital to healthy growth by using one of the Sterling Blusalt products.



Sterling Supermix Blusalt, Sterling Gold Bond Blusalt and Sterling Swine Supermix Blusalt all *combine* high-quality salt with 7 essential trace minerals. The difference is in proportions. Sterling Supermix Blusalt has manganese, iron, sulfate sulfur, copper, cobalt, iodine and zinc in the now known correct amounts for livestock feeds. Sterling Gold Bond Blusalt contains *extra manganese* to guard against leg weakness in poultry. Sterling Swine Supermix Blusalt is fortified with *extra zinc* to counteract parakeratosis in swine.

You can get guaranteed analyses of these three quality Sterling Blusalt products, along with usage charts for each, from International Salt Company. Ask the Sterling representative in your area, or contact our nearest sales office.

Expert service with your salt

The comprehensive services of International Salt Company's Animal Nutrition Department are available to you at any time, free of charge. This department, located in Watkins Glen, New York, does continuing research into the proper use of salt and trace minerals in modern livestock and poultry feeding programs. It's *your department* to consult at any time for advice on mixing or feed-formula problems, and for information on any of the Sterling Salt products.

INTERNATIONAL SALT CO. INC., SCRANTON 2, PA. • *Sales Offices:*

Atlanta, Ga.	Chicago, Ill.	Memphis, Tenn.	Philadelphia, Pa.
Baltimore, Md.	Cincinnati, O.	Newark, N. J.	Pittsburgh, Pa.
Boston, Mass.	Cleveland, O.	New Orleans, La.	Richmond, Va.
Buffalo, N. Y.	Detroit, Mich.	New York, N. Y.	St. Louis, Mo.

Why Blusalt products have a reputation for quality

Every ingredient used to make Sterling Blusalt—the seven minerals, the salt, the anti-separation agents—is thoroughly checked for quality. Each successive step in Blusalt manufacture is closely supervised to insure proper distribution of minerals in the salt. Frequent chemical tests for product uniformity are then made on different batches before Sterling Blusalt is shipped.

This rigorous quality control program is a principal reason why Sterling Blusalt products perform so well. Equally important, International's 50 years of experience in salt are always available to help feed manufacturers select the proper Sterling Salt product and get the most out of that product.

Next time you order salt, why not specify Sterling? You'll be sure of getting today's highest-quality salt products formulated especially for premium feed mixing.

Did You Know?

- Beef cows now comprise 52 per cent of all cows on farms, compared with 39 per cent in 1947.
- The minimum-sized poultry unit for an efficient one-man operation should be either of the following: 4 annual flocks of 30,000 broilers each; 4,000 layers with the steady raising of replacements; or 2,000 turkeys—one flock per year if they are roasters, two or more flocks if they are broilers.

STERLING SALT

PRODUCT OF INTERNATIONAL SALT COMPANY, INC.

MEMBER AMERICAN FEED afma MANUFACTURERS ASSOCIATION INC.

For Better Pellets...

THE SWITCH IS TO PACO

Here's the success story of the feed business . . . what dealers and customers* are saying after they've switched to pellets made from Paco!

"They form better . . . with the glossy and slick look I want."

"Moisture doesn't affect my Paco pellets."

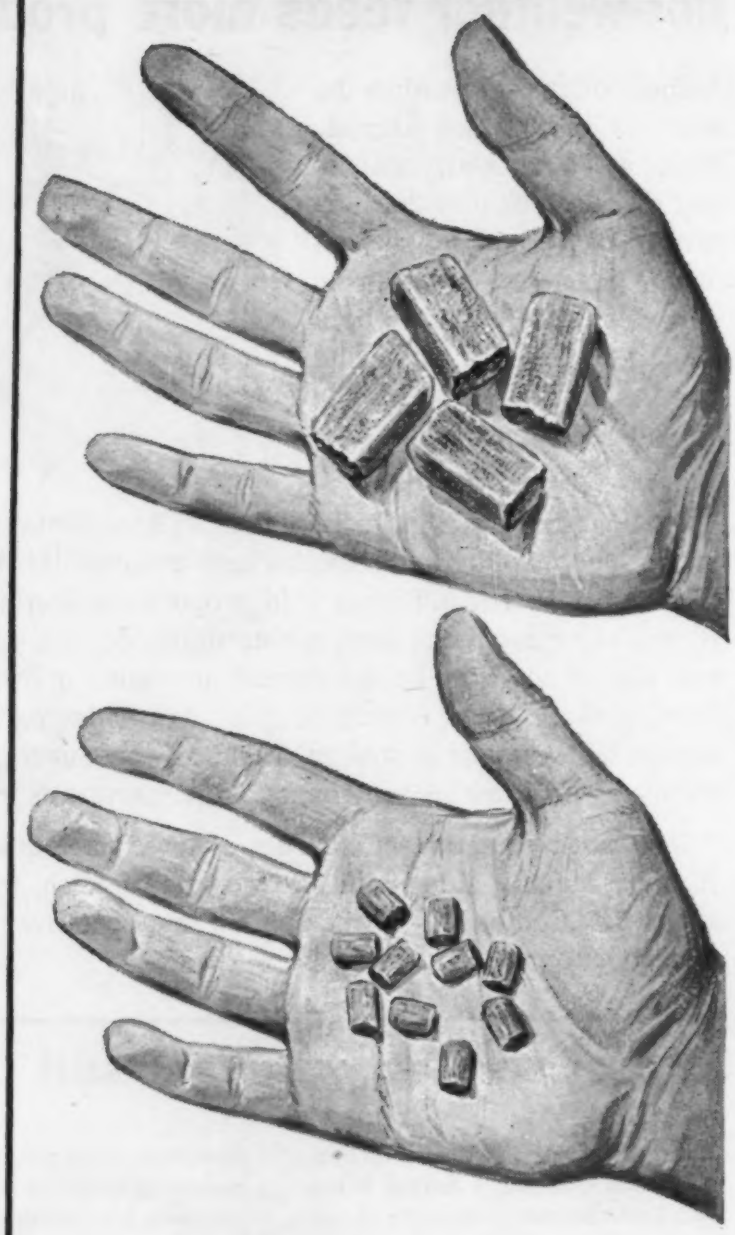
"Fines are down 38%!"

"Customers tell me Paco pellets taste better."

"And smell? Man, they smell good!"

"Production is up a healthy 6%."

"Nobody told me it was the only binder on the market that was nutritious, too . . . but it sure is."



These are the facts! Unsolicited testimonials are proving that Paco means better pellets for your customers . . . regardless of other ingredients in the formula! Stock and sell Paco for bigger profits from pellets!

**names sent on request*

PUBLICKER INDUSTRIES INC.
Animal Feed Sales Department, 1429 Walnut St., Philadelphia 2, Pa.
Without obligation send the following customer folders:

- ☐ POULTRY FEEDS with PACO
- ☐ SWINE FEEDS with PACO
- ☐ DAIRY and BEEF CATTLE FEEDS with PACO
- ☐ CUSTOM MIX DAIRY FEEDS with PACO
- ☐ FARM USES OF PACO

CLIP THIS COUPON TO YOUR LETTERHEAD

GET PACO!

PACKED IN THE FAST-SELLING 50 LB. BAG

PACO MOLASSES DISTILLERS DRIED SOLUBLES

A PRODUCT OF
PUBLICKER INDUSTRIES INC.
1429 WALNUT STREET, PHILADELPHIA 2, PA.
PHONE: LOCUST 4-1400

MIDWEST SALES AGENT—The North American Trading and Import Co., 101 Arsenal St., St. Louis, Mo. Tel: PRospect 6-0858
SHIPMENTS FROM PHILADELPHIA, PA. AND GRETNA, LA.

Economists Discuss Southern Marketing Problems in Bulletin

FAYETTEVILLE, ARK.—Agricultural economists from several southern experiment stations have aired some marketing problems in a bulletin entitled, "Grain Marketing Problems in the South."

The bulletin is composed of remarks by the Southern regional grain marketing technical committee made up of economists from Arkansas, Georgia, Mississippi, North Carolina and Texas; and the Agricultural Marketing Service and Farmer Cooperative Service of the U.S. Department of Agriculture.

The economists say a grain producer has three alternatives in deciding if he should sell or store his product. He may sell at harvest, he may place his grain in commercial storage —with or without a price support loan, or he may store on the farm.

If a producer sells at harvest, evidence suggests that when storage is short, competition of harvest grain to go into immediate use or into available storage space forces prices down. Arkansas producers prefer commercial to farm storage, according to the agricultural economists.

In most areas of the South, eligible farmers can increase their income from grain production by making use of price support loans, the marketing experts stated.

Other conclusions concerning corn, oats, wheat, grain sorghum and soybeans brought out in the study of grain marketing in the South included:

"Increases in total grain production in the South have occurred and are likely to continue.

"Continued expansion in production of grain-consuming livestock in the South will increase the demand for feed grain.

"Additional resources need to be allocated to grain marketing, especially grain storage, and resources now in use need to be used more efficiently. Either farm or commercial storage would add to the efficiency of the grain marketing sector although resources in commercial storage are more likely to be utilized fully.

"Inadequate storage capacity and unfavorable freight rates contribute to depressed grain prices at harvest and to higher prices to food grain and feed grain users, once the harvest glut of grain has been moved out. Lower freight rates would improve the competitive position of grain and livestock production in the agricultural economy of the South and remove one obstacle to larger exports of grain through southern ports," the marketing researchers reported.

The bulletin also gives cost estimates of storing on the farm or in commercial storage and cost of erecting commercial storage facilities.

Single copies of Southern Cooperative Series Bulletin 60, "Grain Marketing Problems In the South," are free if requested from the Bulletin Room, Agricultural Experiment Station, University of Arkansas, Fayetteville.

Loses Lawsuit

VINTON, IOWA — A court decree has been issued against the Vinton Farmers Supply, Inc., at Vinton, to the effect that the firm must carry on its feed manufacturing so as to not cause annoyance to the occupants of the Max Schlotfelt (the plaintiff) residence.

The court agreed with the plaintiff that feed plant shuts off the plaintiff's view, light and free air passage; creates disturbing and disquieting noises through use of heavy machinery; causes odors from fertilizers, tankage and other products, and causes invasion of plaintiff's premises of dust, oat hulls and "other flying or airborne particles."

Judge M. C. Farber in Benton County district court awarded the plaintiff $35 a month damages from Nov. 5, 1950, which is five years prior to the date of commencement of the suit until the date of the decree. The plaintiff had originally sued for $13,000.

Jacobson
QUALITY
FEED MILL EQUIPMENT
Recirculating Collectors
Heavy Duty Inclined Drag Feeders
Heavy Duty Truck Hoists
Ear Corn Crusher Feeders
ECONOMY Alnico Permanent Magnetic Separators
Vertical Mixers
JACOBSON HAMMERMILLS
AJACS Quick Screen Change
UNIVERSAL Quick Screen Change
AJACS-O-MATIC Remote Screen Change
JACOBSON MACHINE WORKS, INC.
Nearly a Half Century of Service to the Feed Industry
1090 Tenth Avenue S. E. Dept. M Minneapolis 14, Minn.

to replace dried whey pound for pound...

use Borden's MG at $4.86 per cwt.

F.O.B. Hampshire, Illinois

Borden's MG

standardized special blend of Milk and Grain fermentation factors providing...standardized whey factor activity for surer growth • 50% more protein • easier handling—free-flowing, no caking • guaranteed riboflavin content of 14 mg. per pound • year 'round availability • low lactose • **and it carries transit**

Phone or wire booking collect to

THE Borden COMPANY
FEED SUPPLEMENTS DEPARTMENT
350 Madison Avenue
New York 17, New York
Tel.: MUrray Hill 7-4100 Ext. 680

Laboratories and Test Farms at Elgin, Illinois

BETTER FEEDS THROUGH RESEARCH

FERMACTO 400 OMNI-MIX BORDEN'S 300

OVERALL **OUTLOOK** on industry developments comes to you weekly . . . while it's still news in FEEDSTUFFS

Study Shows Trucking More Important in Shipping Grain

MINNEAPOLIS—Motor trucks are becoming more important in transportation of Minnesota grain, according to a University of Minnesota survey. The survey showed 40% of the grain purchased by elevators and shipped between Oct. 1, 1956 and Sept. 30, 1957, went by truck. Estimates show that only 27% of the total grain purchases of elevators was trucked in the 1954 crop year. Thirty five percent of the 1955 purchases went by truck.

Agricultural economists Reynold P. Dahl, Rollo L. Ehrich and Richard J. Herder, who made the study, point out that part of the increased truck shipments resulted from drouth in Iowa, Nebraska and other states. Therefore, it's difficult to tell how permanent the trend will be until figures are compiled for later years, they explain.

Nearly 70% of all grain trucked was corn. More than 85% of the trucked corn went outside the state. Soybeans accounted for almost a fifth of all grain trucked from country elevators.

Rail shipment is still important, the economists add. Only 6.3% of the wheat and 13.8% of the barley was trucked. The economists say, however, that more of each will probably be trucked in the future.

They say trucking has become more common partly because rail rates on grain have doubled since 1946. Truck rates haven't increased as much, according to the economists. Other advantages of trucking include better service, less time and less trouble with adjustments for claims, they add.

ABSORBS LESS HEAT

FORT COLLINS, COLO.—A building with a light-colored roof absorbs about half as much heat as a building with a dark roof, according to Colorado State University officials.

Illinois Growers to Pick From 750 Boars

URBANA, ILL. — Illinois swine growers will have their pick from more than 750 tested boars next fall, according to T. R. Greathouse, extension livestock specialist at the University of Illinois College of Agriculture. The boars are being performance-tested this summer in the 15 test stations sponsored by the Illinois Swine Herd Improvement Assn.

Spring pigs at the stations are being tested for average daily gain, feed efficiency, backfat thickness and other highly desirable meat-type traits, says Mr. Greathouse.

Some of the growers got together and organized the Illinois Swine Herd Improvement Assn. several years ago, explains Mr. Greathouse. He says its basic purpose is to improve the Illinois swine industry through better selection of superior breeding stock.

Testing has expanded from 191 boars tested at five stations in 1955 to 485 boars tested at 12 stations last year.

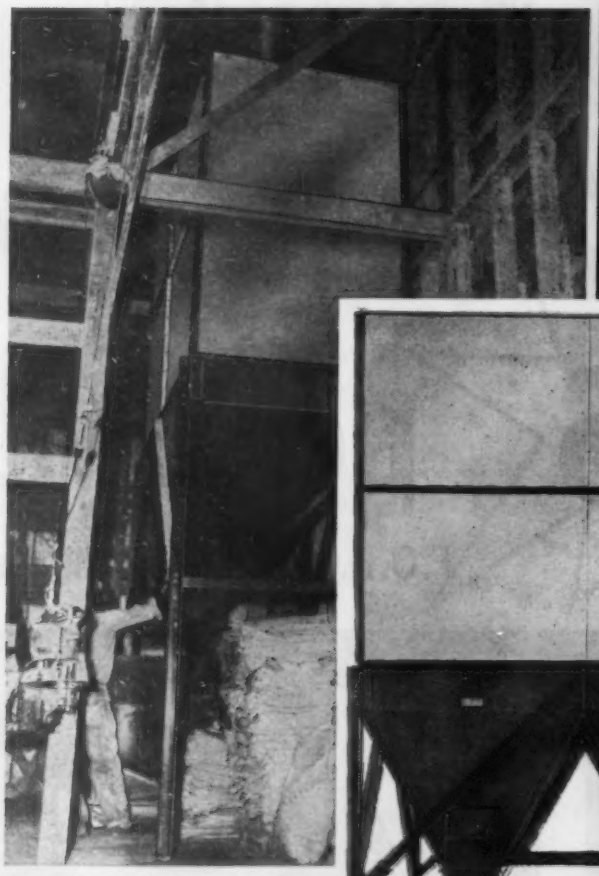
Numbers of barrows on test increased from 191 in 1955 to 303 last year. Size of their average loin-eye area has increased from 3.80 to 3.98 sq. in., and backfat thickness has decreased from 1.58 to 1.47 in., Mr. Greathouse says. Average carcass length of barrows slaughtered last year was 29.59 in., and lean cuts averaged 49.71%.

Boar performance has shown as much improvement, according to Mr. Greathouse. Average daily gain of the boars has increased from 1.76 to 1.87 lb., feed conversion ratio has improved, dropping from 336.8 lb. of feed for every 100 lb. of gain to 295.6 lb., and backfat thickness from 1.37 to 1.21 in. All of these gains have been made through the selection possible as a result of the test station records, he explains.

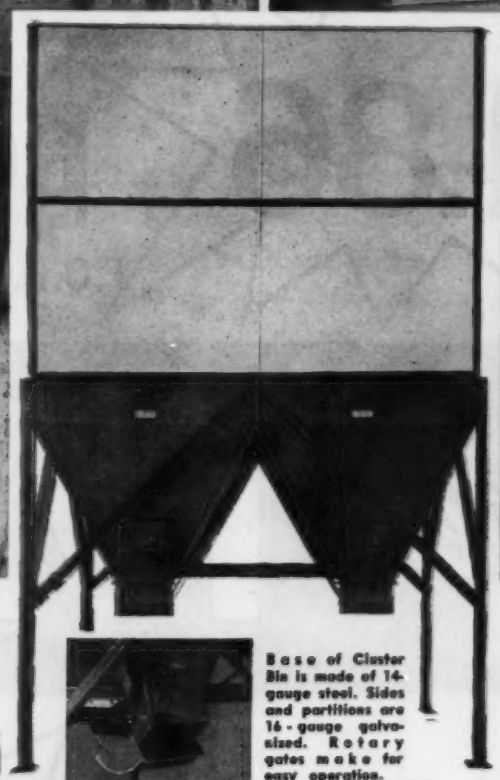
Mr. Greathouse says one of the biggest advantages Illinois swine growers have is the 15 stations in operation all over the state. Most other states having boar testing programs have only one central station located at the agricultural experiment station at the land-grant college, he explains.

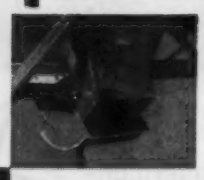
Lemanco GIVES EXTRA STORAGE

with prefabricated square bins

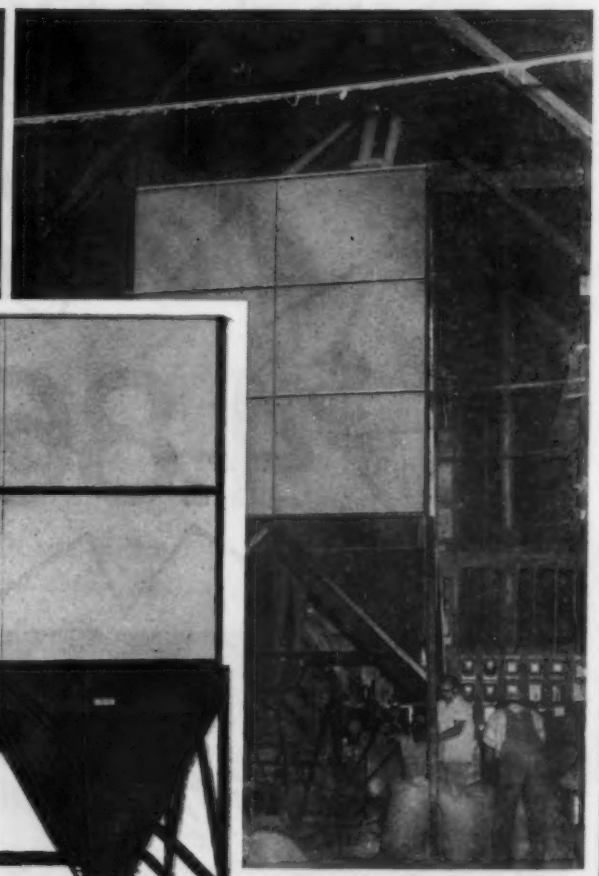


Because of limited space in this mill area a half cluster bin with two hoppers is used to give 10 tons storage of concentrate. Bin was furnished with steel top for air delivery. Many variations of bin and hopper available.

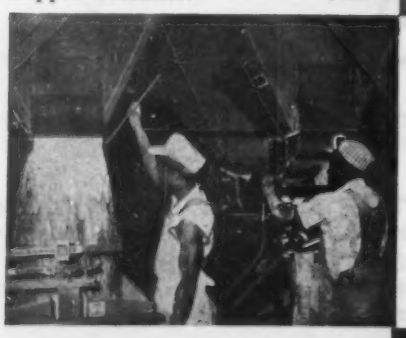




Base of Cluster Bin is made of 14-gauge steel. Sides and partitions are 16-gauge galvanized. Rotary gates make for easy operation.



Cluster bin with 4-foot extension gives storage space of 28 tons utilizing floor area of only 10 feet square. Legs, above, were elevated 18" giving a total clearance under hoppers of 5 feet. Bin used to store crimped oats and cracked corn.



Versatility of this storage bin is demonstrated showing weigh buggy under rotary gate and a bag-out scale set to pivot under all four hoppers. Slide gates for latter operation can be provided.

20-TON CLUSTER BINS FOR FEED MILLS . . .

Need more storage? Look around your mill for those odd spaces not being utilized. Ten chances to one a LEMANCO all-steel bin can be fitted into your operation.

Illustrated is the 20-ton Cluster Bin, open top, having four 5-ton compartments to carry four different ingredients. Each compartment has two 60° angles and one 45° angle. The front is practically vertical, which means that most any type of feed will flow with ease.

The bin, 10 ft. sq., has an overall height of 16½ ft., which can be reduced, if necessary, by ordering shorter legs. Standard clearance underneath the rotary gates is 42 in. This can be increased by blocking up. Sides and partitions can be extended to roof provided listed capacity is not unduly increased. Other Lemanco bin models can be used to good advantage in mill operations.

For further information write or telephone

LEACH MANUFACTURING COMPANY

P. O. Box 1010 GADSDEN, ALABAMA Tel. Liberty 7-5472

U.S. Soybeans, Poultry, Milk Exhibited in Spain

MADRID, SPAIN—The food and feed value of U.S. soybeans was demonstrated in an exhibit at the recent International Trade Fair in Madrid. Other products shown at the U.S. pavilion were dry milk and frozen, ready-to-cook poultry.

The soybean display was placed in the pavilion through the cooperation of the Soybean Council of America. Dr. J. Robert Smyth, head of the department of poultry science at the University of Maine, and Javier de Salas, Spain's representative of the Soybean Council, served at the pavilion as consultants.

The U.S. participation in the fair is part of the program of the Foreign Agricultural Service, U.S. Department of Agriculture, to promote and expand foreign markets.

The milk display included actual operation of a plant for recombining U.S.-produced dry milk and anhydrous milk fat into fluid milk, and the production of ice cream from this milk.

The poultry display included frozen chickens, frozen turkeys, frozen fried chicken, turkey pot pies and frozen chicken dinners.

Wirthmore Winners

WALTHAM, MASS. — Winners of cash prizes in a six-month "Tonnage Builders" contest sponsored by Wirthmore Feeds, Inc., for poultry and dairy servicemen in the company's New England; Olean, N.Y.; and Toledo, Ohio, sales divisions have been announced.

Stuart Newton, St. Albans, Vt., won first prize for top dairy feed sales in the firm's New England west division. Gordon L. Manning, Newport, Maine, won first prize in the New England east division.

First prize for poultry feed sales in the New England west division went to Dan J. Graham, of Poughkeepsie, N.Y. In the eastern New England division Langdon F. Andrews, Camden, Maine, took first prize in poultry sales.

Top winners in the Olean sales division were J. L. Renshaw, Lancaster, Pa., poultry feed sales, and Chester R. Sim, Millville, Pa., dairy feed sales.

In the Toledo division, Charles Mattox, Richmond, Va., won first prize for poultry feed sales. Haven Carskadon, Newport, Ohio, took first prize for dairy feed sales.

Fleischmann's F·I·D·Y

IRRADIATED DRY YEAST

RICH IN VITAMIN D FOR FOUR-FOOTED ANIMALS

Lilly INTERVIEWS

VERNON FREDERICKSEN, WALLINGFORD, IOWA

"I definitely plan to use Hygromix from now on"

"Worming pigs used to be a big problem. It was hard to get them to take enough in the water, and it slowed their gains, too. Hygromix feeds do the job automatically."

by Eugene S. Hahnel

Vernon Fredericksen understands well why Hygromix brings an entirely new concept of worm control to swine management. He wraps it up neatly with this observation: "Worms you *see* have already done their damage."

Hygromix in feed protects pigs throughout the critical growing period. Also, by killing baby roundworms, nodular worms, and whipworms day after day as they enter the intestinal tract, Hygromix prevents them from doing intestinal damage or ever reaching egg-laying maturity.

Proving that he understands the significance of his own statement, Vernon conducted a simple test. "Last fall I checked some of my 135-140–lb. Hygromix-fed pigs," he describes. "I locked them up individually and gave them a heavy dose of purge-type wormer with a syringe. Over a 36-hour period I checked the stools from each pig. I couldn't find a single worm!

"I repeated the test this spring on two pigs out of each litter. Again, I couldn't find any worms. Believe me, when you don't have the worm problem, you're rid of a big headache. For one thing, my pigs finish much more evenly than before Hygromix."

"We think controlling worms with Hygromix will save a lot of feed," says Vernon Fredericksen (right) and feed manufacturer's representative Warren Christensen.

HYGROMIX®

(*S. hygroscopicus* fermentation products, Lilly)

Lilly

Makers of **STILBOSOL®**
(diethylstilbestrol premix, Lilly)
Procaine-Penicillin-G • *Vitamin B_{12}*
Micro-Pen™ (special coated procaine penicillin G, Lilly)

ELI LILLY AND COMPANY • AGRICULTURAL AND INDUSTRIAL PRODUCTS DIVISION • INDIANAPOLIS 6, INDIANA

R. I. Ammon Assumes Duties With NEPPCO

TRENTON, N.J.—Richard I. Ammon has assumed his new duties as executive secretary of the Northeastern Poultry Producers Council (NEPPCO), according to Ernest F. Smith, Jr., NEPPCO president.

Dr. Alfred Van Wagenen, who has held the title of managing director, will become NEPPCO's director of research and development.

For the past eight years Mr. Ammon has been executive secretary of the Pennsylvania Millers' & Feed Dealers Assn. He is a graduate of Yale University's Northeastern Institute for Trade Association Executives and the Newspaper Institute of America. He is a member of the American Society of Association Executives and past president of the Secretaries Circle, an organization of executive secretaries of state and regional grain and feed trade associations affiliated with the Grain & Feed Dealers National Assn.

New NEPPCO programs listed for action in the months ahead are achieving quality incentives for egg producers of the Northeast; the undertaking of programs of special benefit to family-sized poultry farms, as well as conducting research on egg quality improvement programs, improved packaging, the development of modern methods of merchandising and marketing, and the possible efficiencies in mergers of egg and poultry marketing cooperatives.

New Honegger Dealers

FAIRBURY, ILL. — Honeggers' & Co., Inc., Fairbury, has announced 15 new dealers who will handle the firm's complete line of products, including livestock and poultry feeds, layers and farm buildings and equipment. Four of the dealers are in Iowa, three in Nebraska, two in Ohio, two in Illinois, and one each in Missouri, Indiana, Kentucky and Pennsylvania.

Nopco Scholarship

NEWARK, N.J.—Ralph Wechsler, president of the Nopco Chemical Co., Newark, has announced David Mitchell Edwards, Cedartown, Ga., as winner of the Charles P. Gulick Scholarship for 1959. The award winner is the son of Clifford W. Edwards, a machinst at Nopco's Cedartown plant. A recent high school graduate, he plans to study physics in college.

The scholarship is maintained as a tribute to Nopco's founder, the late Charles P. Gulick, who died in 1955.

BUYS PACKING PLANT

LOUISVILLE, KY.—The Klarer Co. has announced that it obtained a 15-year loan of $1 million from the Mutual Life Insurance Co. of New York with the Louisville Trust Co. participating, to purchase the Vissman Realty Co. meat-packing plant property and for an "extensive modernization program" of the various plant facilities it operates.

Appointed to Peterson Breeding Farm Staff

DECATUR, ARK. — John Verlin Terry has been appointed to the position of personnel director and administrative assistant for the Peterson Breeding Farm here. Mr. Terry is a native of Hagerstown, Ill. He graduated from the Community High School at Vandalia, Ill., and from John Brown University, Siloam Springs, Ark., in 1949 with an A.B. degree. He later did graduate work at Baylor University, Waco, Texas.

J. V. Terry

After returning from World War II, Mr. Terry started to work for Peterson in 1949. In 1950 he was ordained a Baptist minister and left Peterson for active ministry at churches in the north Arkansas area. He returned to the Peterson organization in November, 1958. Mr. Terry combines his personnel work with counseling services.

Test Shows Sprinkling Hogs of Little Value

LEXINGTON, KY. — Growing-finishing hogs confined to concrete feeding pens and sprinkled 12 hours a day during the hot summer months did no better than the unsprinkled hogs in a comparison test reported recently from the University of Kentucky.

The sprinkled hogs averaged 1.61 lb. daily gain; the unsprinkled hogs averaged 1.49 lb. daily gain, or within .12 lb. of the cooled group.

Daily feed consumption per hog was about the same, according to Prof. C. E. Barnhart, Kentucky experiment station swine specialist—5.12 lb. for the "dry" groups, and 5.55 for the sprinkled group.

Total feed consumed per 100 lb. of gain was slightly more than 343 lb. for each group, and feed costs per 100 lb. gain were within 30¢ of each other — $9.48 for the unsprinkled group, and $9.78 for the sprinkled set. Average final weight for the unsprinkled groups was 182.7 lb., and for the sprinkled group, 193.2 lb.

Putting a fine fog of water on hogs in hot month has been recommended frequently.

Fish Product Tested In Poultry Rations

ATHENS, GA. — Condensed whole Gulf fish do not give as good results as condensed fish solubles for poultry rations, a recent test at the University of Georgia Experiment Station showed.

Condensed whole Gulf fish, a new commercial product made to give unidentified growth factors (fish factor) for poultry rations, was compared with the condensed fish solubles, both in the presence and absence of other UGF sources.

In one trial in battery brooders under laboratory conditions, and another under practical floor conditions, the condensed whole Gulf fish did not give as good results as the condensed solubles, it was reported.

Builds Laboratory

HAMMOND, IND. — American Maize-Products Co., Hammond, is building a new quality control laboratory. Completion is expected early in 1960, and it will have 19,000 sq. ft. of floor space.

The present quality control laboratories will be added to the firm's research facilities.

The company manufactures starches, syrups and other derivatives from the more than 12 million bushels of corn it processes annually.

You'll be ahead 6 ways with

Minnesota

LINSEED GRITS

★ MORE PALATABLE
★ MORE EASILY DIGESTED
★ MORE PROTEIN IN EACH SACK
★ COSTS NO MORE THAN PELLETS
★ NO FINES TO BLOW AWAY
★ UNIFORM APPEARANCE

Minnesota Linseed
MEAL ◦ PELLETS ◦ GRITS
offer these important benefits:

1. Puts bloom and finish on feeder cattle
2. Promotes feed consumption—speeds fattening
3. Helps increase milk production
4. Brings beef cattle, sheep and hogs to market peak sooner
5. Greater palatability
6. Higher protein efficiency

Add low cost Minnesota Linseed Grits to your present formula or sell it in bulk for straight feeding. Minnesota Grits offer every single advantage of Minnesota Linseed Meal . . . *plus* important new features not available in meal form!

Minnesota Linseed Grits are uniform in size and appearance, uniformly easy to digest. Minnesota Grits aren't dusty—won't blow around the feed lot or when you're mixing feeds. *Remember, the price of grits is no higher than that of Minnesota Linseed Oil Meal in pellet form.*

Write . . . Wire . . . Phone for today's quotation on Grits!

Minnesota
LINSEED OIL CO.
Minneapolis 21, Minnesota
SUnset 8-9011

Home Economist Joins Larro Feed Division

MINNEAPOLIS — The Larro feed division of General Mills, Inc., Minneapolis, has increased its services to homemakers by adding to the company's Betty Crocker home service department a home economist who will specialize in the promotion of farm products, Arlene Almonrode, who has been active in 4-H Club and home demonstration work in Indiana for 15 years, will represent Larro and Betty Crocker at various meetings and conventions throughout the U.S. In addition, she will create new recipes and menu ideas for meats, turkey, chicken, eggs and milk.

Arlene Almonrode

"This is another step to broaden the marketing and use of farm products and extend the services of Betty Crocker to the homemakers of the nation," said Eugene E. Woolley, general manager of the Larro feed division. "Day in and day out the Betty Crocker kitchens are developing and promoting new recipes and menu suggestions that feature eggs, milk and meat. We feel this is more important today than ever before."

Elevator Fire Causes $1 Million Damage

FREDERICA, DEL. — Fire recently destroyed the George C. Rothwell, Inc., grain elevator at Frederica, along with nearly 150,000 bu. of grain and considerable equipment. Loss is estimated at $1 million.

Firemen said they thought the blaze was caused by combustion of 20,000 bu. of grain that had been put into the elevator the same day. Some 20 fire departments fought the fire, and a fire chief and a fireman were overcome by smoke. The fire burned through three smaller annexes in addition to the main building, a four-story structure of corrugated steel.

Thousands of spectators—many of them had been attending the Delmarva Chicken Festival at nearby Dover, Del.—gathered at the scene.

Firemen were seriously hampered at first when they attempted to pump water from the Murderkill River. They were forced back on several occasions by the intense heat generated by burning wheat, rye and barley.

CORPORATION CHARTER

ENGLEWOOD, COLO.—The Cheyenne Wells Grain Corp. has been issued a state corporation charter with $24,000 capital stock to buy, sell and process grains. E. L. Dailey, Jean Dailey and Willa D. Haitz are listed as incorporators.

PLAQUE PRESENTED—Executives of the Alley-Johnson Co., Kansas City, are presented a plaque by R. N. Ammon (left), manager, St. Joseph feed division, Ful-O-Pep Feeds, for having handled more than 7,000 tons of Ful-O-Pep feed last year. Pictured with Mr. Ammon (starting second from left) are: L. T. Johnson, Dale Alley and J. H. Alley, all of the Alley-Johnson firm, and John Gross, district representative for Ful-O-Pep Feeds. The award was presented in connection with a poultry clinic sponsored by the poultry research department of the Quaker Oats Co. and directed by Norman Smith, manager, feed sales training and dealer development.

SERVE MORE CUSTOMERS *Faster*

WITH THIS NEW LIGHT WEIGHT SIMONSEN HIGH DELIVERY BULK & SACK FEED BODY

You'll be way out in front with this attractive new Simonsen High Delivery Combination Body on your truck. It's all steel, light weight — hauls more payload. Hauls bulk and sacks on the same trip — cuts delivery costs. Completely hydraulic, with fast front end delivery at 600 lbs. per minute and reaches 21 feet up. Order the size and compartment arrangement you need. Write now for full details on this custom built body by the number one name in bulk feed delivery equipment.

S

SIMONSEN MANUFACTURING CO.
Dept. FS QUIMBY, IOWA

Rigid laboratory control ends trace-mineral worries

Lime Crest TRADE MARK BRAND

All Lime Crest trace-mineral pre-mixes, both standard and custom made, are under rigid laboratory control. That control begins with the ingredients and doesn't end until the final product has been checked.

Because of Lime Crest's complete laboratory control (both chemical and spectrographic methods are used) the feed manufacturer who uses Lime Crest trace-mineral pre-mixes need not worry that his feeds contain too little or too much of the trace minerals his nutritionist has specified.

LIME CREST TRACE-MINERAL PRE-MIXES

Made by LIMESTONE PRODUCTS CORPORATION OF AMERICA, NEWTON, NEW JERSEY

World's Largest Producer of Crystalline Calcite Products

CANADIAN DISTRIBUTOR: The Ash Chemical Co., 353 St. Nicholas St., Montreal 1, P. Q.

SHELL!

The most digestible calcium product on the market is EGGSHELL BRAND Oyster Shell. This heat-sterilized soft, reef shell is highly palatable to hens . . . goes to work turning out sturdy egg shells in less than 6 hours after consumption. Tests show it makes stronger egg shells.

SWELL!

High-producing layers need as much shell as they'll eat. That's why we recommend palatable, soft, reef shell. Even ordinary hens eating 4 lbs. of shell a year can produce as many as 24 extra fine-shelled eggs. Poultrymen prefer them because hens prefer them.

SELL!

There's only one best-seller in the Northeast, and that's EGGSHELL BRAND Oyster Shell. It outsells any other shell or calcium substitute. This sales leader is promoted in the trade publications and backed by merchandising aids that really do the job.

"Egg Shell Quality Begins With EGGSHELL BRAND"

EGGSHELL BRAND OYSTER SHELL
a product of
OYSTER SHELL CORPORATION
BALTIMORE, MARYLAND

FEEDSTUFFS—*LEADER in its field*

More advertisers use FEEDSTUFFS than any other publication in the feed industry

COCKERELS CONTROL FLIES — John L. Rodriguez, Jr., University of California researcher, checks effectiveness of cockerels in eliminating a fly nuisance beneath layers' cages on a poultry ranch near Riverside. By eating fly larvae, the cockerels—free discards from hatcheries—knocked out fly infestations on the ranch for three months, and were even more effective in tests on the Citrus Experiment Station flock maintained by Mr. Rodriguez. Cost of cockerel upkeep was reported negligible.

Cockerels Used To Control Flies Under Layer Cages

BERKELEY, CAL. — A new approach to fly control on poultry ranches is reported to have shown "striking" success in a University of California study at Riverside.

John L. Rodriguez, Jr., university researcher, uses cockerels — male chicks normally discarded by hatcheries—to control house flies in the Citrus Experiment Station's laboratory flock here. The cockerels were obtained free from a hatchery and at the age of two weeks were put to work scratching in droppings under the layers' cages. The cockerels eat larvae that otherwise would become adult flies.

Field trials using the same fly control method on a commercial egg ranch also completely eliminated a heavy infestation of the insect for three months.

If continued testing of the cockerels on commercial ranches supports his preliminary findings, Mr. Rodriguez believes California poultrymen —plagued by potential or actual fly problems—will have a more effective and economical method of eliminating flies.

Working with Dr. Louis A. Riehl, entomologist, Mr. Rodriguez found the cockerel method a practical means of solving his own fly problem

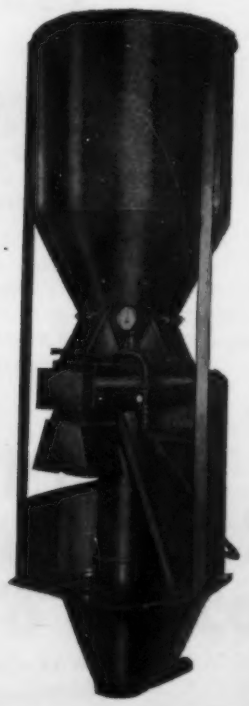
YOU SAVE 1 2 3 WAYS

WITH THIS **SECO** COMBINATION FEED MIXER | MOLASSES MIXER

You save on SPACE . . . you save on ORIGINAL COST . . . you save on OPERATION COST—all three!

And you have all the features of the SECO Vertical Mixer—together with the many advantages of the SECO Molasses Mixer—the mixer that cleans itself!

Easily installed . . . adaptable to any plant operation ... engineered for maximum production in minimum space . . . with big capacity (up to 4 tons per hour). Can be operated with electricity, tractor or single power unit.



WRITE FOR COMPLETE INFORMATION

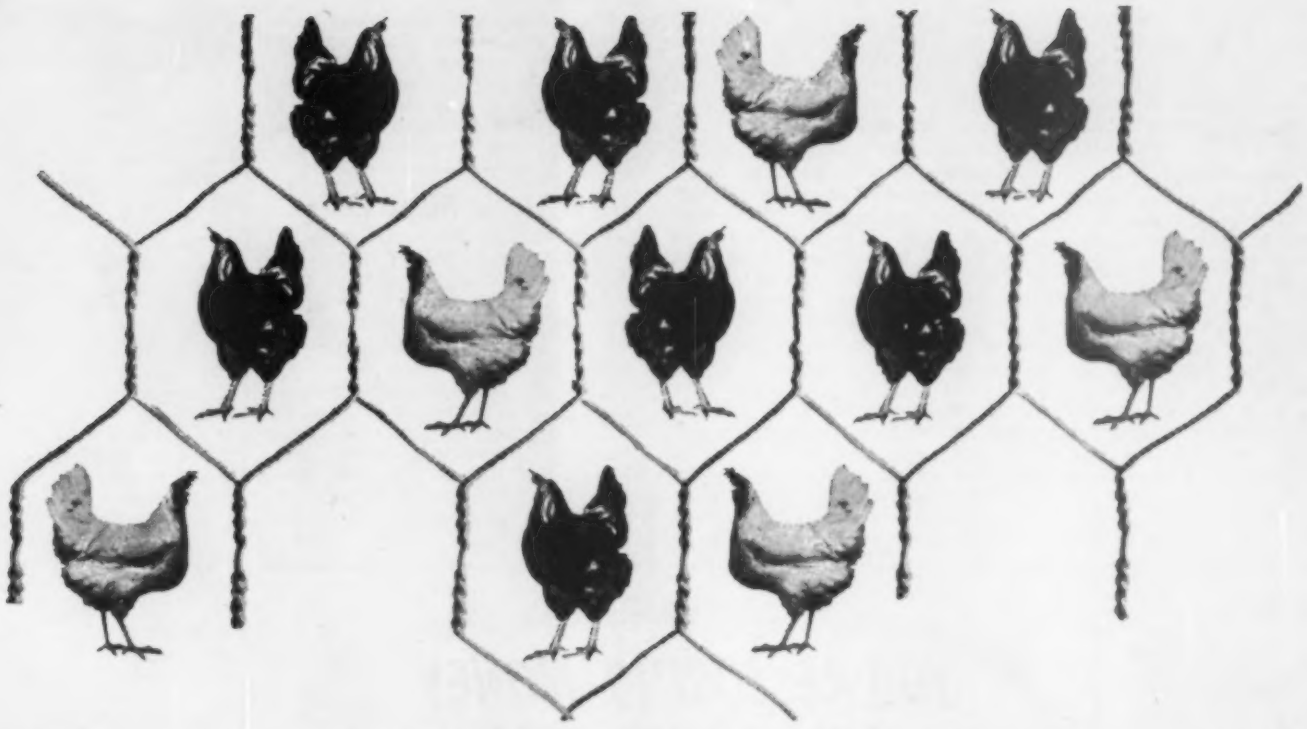
SECO inc. GOODLETTSVILLE, TENNESSEE

GOODLETTSVILLE, TENNESSEE

Seco offers to the feed industry experienced mill Planning, Engineering and Manufacturing Service on equipment needs—including complete mill installations. Your inquiries are invited.

✓ NEWS
✓ TRENDS
✓ PICTURES
✓ MARKETS
✓ RESEARCH
✓ CALENDAR
✓ EDITORIALS
✓ WANT ADS
✓ NEW PRODUCTS

...vital...timely... weekly...only in FEEDSTUFFS



CORONET Proves... Not Merely Claims... High Phosphorus Availability

THE PROOF IS IN THE TESTING OF CDP

There is a WORLD OF DIFFERENCE between merely "claimed" and ACTUALLY PROVED biological availability of phosphorus feed supplements. Only through exhaustive feeding tests can the amount of usable phosphorus in a supplement be substantiated.

CDP's (Coronet Defluorinated Phosphate) high phosphorus availability has been tested and recognized by State Agricultural Experiment Stations and independent research laboratories not affiliated with Coronet. *Results of nutritional tests are available upon request.*

CDP's PROVEN high biological availability gives you ABSOLUTE ASSURANCE that your phosphorus dollar buys usable phosphorus which can be directly absorbed and easily converted to meat, eggs, and milk.

CDP . . . through exhaustive feeding tests at independent laboratories . . . PROVES . . . not merely claims . . . its high phosphorus availability.

Guaranteed Uniform Analysis

Phosphorus	Calcium	Fluorine
17.0% min.	34.0% min. 36.0% max.	0.17% max.

Solubility Comparison of CDP With Other Defluorinated Phosphates

PRODUCT	Solubility in 0.4% HCl	Solubility in 2% citric acid	Solubility in neutral ammonium citrate	Average total solubility
CDP	100.00%	87.14%	86.16%	91.10%
Product A	96.48%	51.19%	19.41%	55.69%
Product B	82.79%	38.61%	9.08%	43.49%

Let us figure the cost of CDP delivered to your plant

Coronet...50 years of research...quality control...service

CDP CORONET PHOSPHATE COMPANY
Richmond 1, Virginia
A Division of Smith-Douglass Company, Inc.

in the campus experimental flock. The flock is maintained for studies of ectoparasites of poultry such as lice, ticks and mites.

He couldn't use insecticides to control flies since part of the flock is used as a host for colonies of various insects under study. Removing manure once a week was too expensive.

Fly Eggs Planted

When flies did not appear in the manure patrolled by the cockerels, Mr. Rodriguez planted 1,500 house fly eggs in the droppings and then planted comparable egg masses two or three times each week thereafter. Besides implanting fly eggs, Mr. Rodriguez wet the manure in a deliberate attempt to provide favorable fly-breeding conditions.

The young birds were given routine inoculations for disease and general care in line with accepted practice. He fed them a light portion of scratch and mash each evening, timing feedings to keep the birds hungry during daylight hours and to encourage their interest in hunting and eating fly larvae and pupae.

The supplemental feed, inoculations and labor to maintain the cockerels averaged only a quarter of a cent per adult hen in the laying flock per month.

Excellent Results

Results were excellent. From the beginning, fly larvae and pupae were almost completely absent in the cockerel area, while the check area ranged from 25 to 365 larvae per square foot beneath the laying hens.

By the 15th-20th week Mr. Rodriguez still could find no pupae or larvae in the cockerel area. At the 26th week the manure was removed.

Cockerels were replaced at 13 weeks of age with young chicks.

Mr. Rodriguez uses a ratio of one cockerel to 10 hens. However, he said, since fly conditions on commercial ranches are rarely as bad as those he deliberately created in the laboratory experiments, results obtained suggest that the ratio could probably be reduced to something like one cockerel to 20 hens.

Experiments are now under way on three commercial poultry ranches to test the cockerel fly control system further and to make sure there are no added disease problems as the result of letting cockerels run free on the ground.

Mrs. Ruth Stoll Dies

PORTLAND, ORE.—Mrs. Ruth E. Stoll, 63, president of H. J. Stoll & Sons, Portland feed ingredient firm, passed away recently following a series of attacks which had confined her to a Portland hospital for several weeks.

The deceased was the wife of Hugh Stoll and the mother of William E., Robert F., and Hugh J., Jr. Other survivors include a daughter, Mrs. Margaret E. Blakesley; a sister, Mrs. Mary Pofford; a brother, William Edwards; 11 grandchildren and one great grandchild.

YOU'RE LOSING MONEY
DELIVERING FEED
BY THE SACK!
A U. S. Government Study* reveals almost 40% of labor in handling bag feeds is wasted . . . in idle and delay time, and in time lost by workers who return to the conveyor empty-handed after loading bags into trucks, rail cars, or storage.
*U. S. Dept. of Agriculture Marketing Research Report No. 205

BOOST YOUR PROFITS... BAUGHMAN SF-8 BULK FEED BODY

• BIGGER PAYLOADS
• BIGGER LABOR SAVINGS

A High-Speed Screw-Feed Body designed for one-man operation and Baughman-Engineered for easy, inexpensive maintenance. Makes more deliveries per day, with fewer man-hours spent in feed handling. You save the cost of bagging feed, can sell at a lower price, and still make more money.

THERE'S A BAUGHMAN BULK FEED BODY TO FIT YOUR NEEDS

MODEL PF-6 . . . Pneumatic discharge . . . delivers bulk feed . . . "by air". Sealed air discharge delivery up to 600 lbs. per minute. Air stream delivers to high bins out of reach of conventional discharge units. PTO or auxiliary engine drive . . . truck or trailer mounted . . . in lengths from 10' to 40'. Bulletin A-426.

DU-ALL . . . Utility Bulk Feed Body. Does double duty: 1. Automatic self-unloading of bulk feed; hydraulically-operated discharge auger unloads 250-500 lbs. per minute. 2. General hauling. Close discharge ports and Du-All hauls livestock, produce, farm equipment, building supplies, etc. Bulletin A-420.

Baughman SF-8 features include:

COMPLETELY AUTOMATIC DISCHARGE — through horizontal and vertical augers.

MULTI-COMPARTMENTS — permit carrying of mixed loads, and pre-measuring of separate loads before delivering.

SELF-CLEANING — through body augers which clear the body of old feed . . . leave nothing to contaminate new loads.

ONE MAN OPERATION — of entire operation, including speed of discharge and positioning of discharge auger through full 280° sweep. Convenient controls are on side of body.

CHOICE OF DRIVES . . . LENGTHS — The SF-8 is available with Power-Take-Off or Auxiliary Engine Drive . . . in lengths from 10' to 40' . . . either truck or trailer mounted. Also available in aluminum for increased payloads.

Ask for Bulletin A-427

BAUGHMAN MANUFACTURING CO.
199 Shipman Road • Jerseyville, Illinois
Please send me additional information on
☐ SF-8, Bulletin A-427
☐ PF-6, Bulletin A-426
☐ Du-All, Bulletin A-420
WRITE for bulletins by numbers listed under each model.
NAME.....
ADDRESS.....
CITY.....ZONE.....STATE.....

Better Service thrrugh Better Engineering
Service and Parts from 200 Service Branches
BAUGHMAN MANUFACTURING CO.
JERSEYVILLE, ILLINOIS

NBC Official States Position on Retail Pricing Practices

WASHINGTON — The National Broiler Council's position on broiler pricing practices of food retailers was outlined recently before the Select Committee of Small Business of the House of Representatives by Frank Frazier, NBC executive vice president.

"Our position is quite clear," Mr. Frazier said at the Washington hearing. "We would ask simply that retailers reflect the farm price to consumers after taking a reasonable mark up for their services and profit, in a manner that will result in a reasonably smooth and orderly flow of our product to the consumer. In this way, if too many chickens are being produced, lower prices from the consumer will tell our industry to put the brakes on production."

Mr. Frazier further explained NBC's position on the "present crisis" in the broiler industry with these specific points:

- "NBC has not requested either government price supports or production controls, and the progress of the broiler industry through the years has been without them.
- "NBC has not recommended legislation, nor requested congressional hearings to even consider the possibility.
- "NBC has not threatened court action of any type, nor charged any retailer or group of retailers with anti-trust law violations.
- "NBC has not asked retailers to stop featuring chicken as a good buy for their customers. Actually, such sales properly conducted are of great value to the consumer, the retailer and the broiler industry."

Search Begins for Poultry Princess

TRENTON, N.J.—A 14-state search for "Poultry Princess of NEPPCO-land" candidates is underway, according to officials of the Northeastern Poultry Producers Council (NEPPCO).

Poultry organizations from Maine south to West Virginia and west to the Indiana line are searching for candidates to participate in the final judging during the NEPPCO Exposition in Harrisburg, Pa., Oct. 6-8.

Chairman of the special exposition committee in charge of the event is Fred Libutzke, Connecticut state department of agriculture official. Rules place major emphasis upon the beauty, poise and intelligence of the contestants. Mr. Libutzke reports that while affiliation with some segment of the industry is a requisite, this will not be a judging factor.

Each of the state associations that make up NEPPCO is being asked to select a candidate for the competition. Other groups, including county associations, marketing groups, cooperatives, and allied industry firms and organizations are also invited to submit candidates.

Each sponsor will be responsible for the appearance of his candidate at the exposition. There will be no preliminary state elimination. Each candidate, however, must be registered with the committee by Sept. 21. Every application must be accompanied by a photograph.

Application forms may be obtained by writing to the NEPPCO Office, 10 Rutgers Place, Trenton 8, N.J.

NEW MILL OPENED

AINSWORTH, IOWA — The Community Feed Store at Ainsworth recently held a grand opening at its new mill and elevator. The new elevator, made of pre-stressed concrete, includes two 4-ton mixers, molasses injectors, hammermill, automatic bagging scales and other items of modern equipment.

APHF Panel to Discuss Who Will Supply Retail Egg Outlets

ST. LOUIS, MO.—A panel will discuss what egg production units will most likely supply the nation's retail outlets during the APHF American Poultry Congress and Exposition in St. Louis, July 21-23. The panel is scheduled for July 23.

Participants on the panel are Gerald Wilkins, poultry editor, Doane Agricultural Digest, St. Louis, moderator; Ray R. Flumerfelt, in charge of egg marketing, Grange League Federation, Ithaca, N.Y.; Ben Geifman, executive vice president, Eagle-United Stores, Rock Island, Ill.; and Howard Randolph, president, Randolph Foods, Inc., Guthrie Center, Iowa.

Some of the questions to be discussed are:

1. What advantages are there in direct farm procurement?

2. Will the size of flocks supplying stores be in the 80,000 to 90,000 layer category or the 2,000 to 10,000 class?

3. Do stores anticipate establishing "specification" in feed to obtain uniform yolk color?

4. Will national retailers obtain large quantities locally?

5. What basis will stores use in determining price — Chicago or New York Mercantile Exchange quotations or a price on a cost of production plus margin basis?

6. Is there a possibility retailers may have to "own" their flocks and pay farmers for the use of land, labor and equipment?

7. Who will act as the "entrepreneur" in establishing flock programs for the stores?

8. Will producers establish bargaining groups to reach accord with retailers on paying prices when margins narrow?

9. Will the retailer contract with producer groups through cooperatives, independent feed manufacturers or the independent egg assembler?

Oil Processing Plant Planned in Alberta

LETHBRIDGE, ALBERTA—Plans have been announced for a large edible oil processing installation at Lethbridge. It will be the first full-scale plant of this type in western Canada.

Western Canadian Seed Processors, Ltd., said Girdler process equipment division of Chemetron Corp., Louisville, Ky., will engineer and equip basic plant facilities.

The million-dollar project will be part of an ultimate $4 million operation expected to open new markets for at least 120,000 acres of oil seed crops in the region. It will be integrated with a seed cleaning and processing plant recently placed in operation, and a solvent extraction plant, nearing completion, that will produce crude oil from sunflower and other seeds as raw material for the new edible oil plant, and will process the seed residue into meal for livestock feed.

Currently almost 100% of western Canada's growing consumption of vegetable oils and close to 90% of its meal for livestock feed have been brought in from Eastern Canada, the U.S. and elsewhere, according to Western Canadian Seed Processors.

Operation of the plant, which will have a capacity of 60 tons per day, is planned for the first half of 1960. Design of the plant incorporates plans for doubling capacity in the near future.

Joins Eshelman Grain

TOLEDO, OHIO — Paul Atkinson, who resigned recently as vice president and manager of the Norris Grain Co. at Toledo, will be manager of the grain division of Eshelman Grain, Inc., Columbus, Ohio. Mr. Atkinson was manager at Norris for 19 years. Earlier he was in the company's New York export office. He is a past president of the Toledo Board of Trade, from which he also has resigned.

Idaho Study Indicates Corn Increases Gains

CALDWELL, IDAHO — A ration containing a roughage of two thirds of the dry matter as corn silage makes more efficient gains in fattening steers than a roughage 50% corn silage, according to University of Idaho livestock people.

Results of feeding trials are summarized in a bulletin entitled "Formulation of Idaho Steer Fattening Rations," authored by T. B. Keith, W. P. Lehrer, Jr., and the late R. F. Johnson.

The research also indicated there is an increase in the rate of gain and a decrease in the feed required for a unit of grain when the ratio of concentrate to roughage is increased from 1:2 to a ratio of 2:1.

There is a slight increase in the rate of gain and a decrease in feed requirements when the ratio of concentrate to roughage is increased to 4:1, according to the authors. This increase in rate of gain is not economical under all conditions, they add.

The researchers say including protein concentrate in a concentrate mixture of barley, oats and dried molasses beet pulp did not improve the ration when alfalfa hay was the roughage.

Their feed trials showed the inclusion of a 10% soybean oil meal mixture in a concentrate consisting of barley, oats and dried molasses beet pulp increased the rate and economy of gains of steer calves when the roughage mixture included 50% or more of the dry matter as corn silage.

W. C. Klein Elected President of Bunge

NEW YORK—Walter C. Klein has been elected president of the Bunge Corp., major grain and commodity firm, succeeding Robert F. Straub, Sr., who continues as a director.

W. C. Klein

Mr. Klein, a Bunge vice president since 1952, was elected to the board of directors in 1955. He earlier was affiliated with Swift & Co., Chicago, and Swift Rio de la Plata, Buenos Aires.

Bunge, which operates offices in many of this country's principal grain producing areas, has elevator facilities in excess of 30 million bu. of grain.

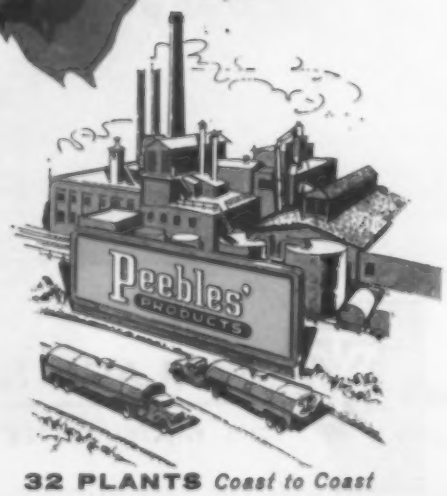
Gives you 3 ingredients in 1!

Important milk nutrients! Real cheese for appetite-sharpening aroma and flavor! Essential vitamin fortification! Peebles' new DDF gives you all three at lower cost.

DDF is a specially balanced dog food premix that blends these important product features into one convenient package. It can be incorporated easily into any type of dog food—dry, wet or biscuit.

DDF saves you money by reducing your ingredient inventory needs...doing away with more expensive single item purchases from a variety of sources. Just add DDF at a 5% level to your present formula to get milk solids, cheese and vitamin benefits. Uniform texture assures even distribution in mixing.

Find out how you can use Peebles' new DDF in your dog food. For complete information and sample, wire or write: Department 45A.



WESTERN CONDENSING COMPANY
APPLETON, WISCONSIN
World's Largest Producer of Whey Products

32 PLANTS *Coast to Coast*

Lambs in Illinois Tests Gain Pound On 4 Lb. of Feed

URBANA, ILL. — Lambs at the University of Illinois have gained more than a pound on less than 4 lb. of feed.

This gain is much better than the usual pound on 6 lb. of feed that sheep feeders consider good in Illinois feedlots, says H. W. Essig, animal nutrition researcher at the University of Illinois Agricultural Experiment Station.

So far, the rations used on the test lambs have been laboratory rations only, Mr. Essig explains. The essential nutrients in these "high-powered" diets have been some of the so-called volatile fatty acids, mainly acetic acid.

None of the feedlot rations now being fed to lambs contain volatile fatty acids as such, Mr. Essig says. Normally these acids are formed in the rumen during digestion. Results of these experiments in which the rations contain high levels of volatile fatty acids show that it is these compounds that lambs use as their source of energy.

These lamb gains show researchers that ruminants can make good gains without eating any roughage at all. "This does not mean that lamb and beef rations in the future will not contain any roughage," Mr. Essig noted. "But the results of this series of experiments open up a new area of research."

He predicts that new studies in this area may lead to some radical changes in farm feeder rations as cheaper sources of such ingredients as the volatile fatty acids are found.

He says much work is yet to be done on relative costs of these new lamb ration ingredients, amounts to be fed in practical rations and development of new sources of the fatty acid ingredients before they can be recommended for farm feedlot rations.

Indiana Egg Board Studies Certified Plan

LAFAYETTE, IND.—The Indiana State Egg Board, in cooperation with the U.S. Department of Agriculture and Purdue University's agricultural experiment station, is studying new procedures for certifying egg quality and developing a new quality designation for eggs merchandised under controlled conditions.

The proposed requirements of a new quality controlled egg grading program have been considered and tentatively approved by the Indiana State Egg Board, according to E. R. Menefee, executive secretary of the board.

Plans are being made for a public hearing to discuss the proposed new grade of eggs, Mr. Menefee said. Interested persons will be requested to submit their views and suggestions regarding the requirements as set up by the board.

A special state mark is being considered for use on eggs produced under this program.

According to Mr. Menefee, the plan is based on two premises: That it is possible to produce high quality eggs so uniformly that they need not be individually hand candled to segregate quality and that through proper handling this high quality can be maintained for a reasonable period of time.

The plan was made feasible through the development of an objective break-out test to measure egg quality, said Mr. Menefee. This method measures egg quality on the basis of observable yolk condition and in terms of "Haugh units," which are simply scale readings based on the weight of an egg and the micrometer measurement of the height of its thick albumen (white).

Grandma could get away with it!

Grandma's recipes were a pinch of this and a dibby-dab of that.

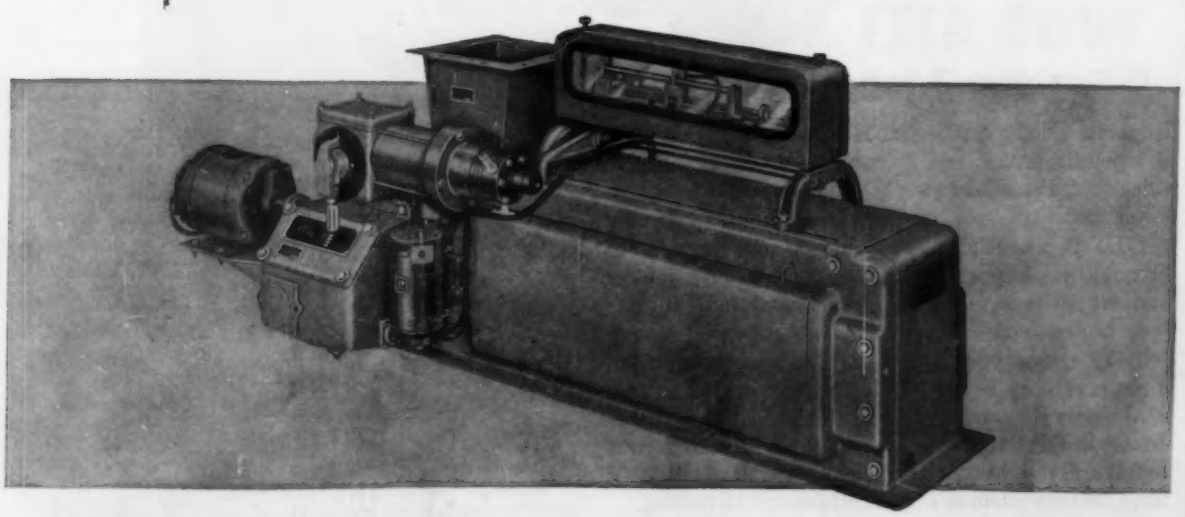
That was fine for Grandma. But it won't work in process blending. Here, you need precise control, minute-to-minute accuracy, exact formulations.

And you get just this and more with W&T's Merchen Scale Feeders and Meters. They control or measure feed rates by weight. There's no guess work. You get exactly what you set the equipment for . . . yields are known; quality is controlled.

You can feed any free-flowing solid in batch or continuous blending operations . . . as little as 3 lbs. per minute; as much as 3000.

And you do it with W&T's rugged, compact Merchen equipment—built for performance . . . built to give you profit-making control . . . built to take the "Grandma" out of your process blending.

Interested? Write Dept. M-48.36

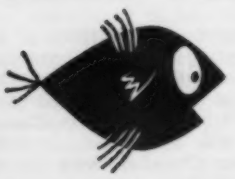


WALLACE & TIERNAN INCORPORATED

25 MAIN STREET, BELLEVILLE 9, NEW JERSEY

WHAT!

Food Without a Hook?



FEEDSTUFFS

Offers a lot to its readers..no catch to it. $5 a year brings 52 issues crammed full of information.

MERCK

DON'T TRY TO SECOND-GUESS THE WEATHER-MAN!

Coccidiosis is a year 'round problem.
Give your growers the tops in
coxy protection in all kinds of weather...
all year 'round with NICARB in your
broiler starter and grower rations.
Merck & Co., Inc., Chemical Div., Rahway, N. J.

NiCarb®

Tried, Tested and Proven on over Four Billion Birds

©TRADEMARK OF
MERCK & CO., INC. FOR NICARBAZIN
©MERCK & CO., INC.

DOW | FEED ADDITIVES

Looks like everybody wants

DOW METHIONINE

No wonder! It helps formulators keep finished feed costs in line . . . lets them take advantage of good buys in ingredients, and supplement with highly concentrated synthetic methionine. That's why we're selling more methionine than ever . . . and we can still deliver promptly anywhere!

THE DOW CHEMICAL COMPANY
MIDLAND, MICHIGAN

MINK FOOD DISPLAY—Feed dealers attending the recent Training Institute of Archer-Daniels-Midland Co., Minneapolis, look over a display featuring the firm's new mink food. They are (left to right): Mrs. E. P. Weeth, Gretna (Neb.) Mills; Arnold Masters, Staley Farm Supply, Alexander, Iowa, and K. C. Thompson, Staley Farm Supply, Hampton, Iowa.

ADM Holds Training Institute for Dealers

MINNEAPOLIS—New cattle, mink and hog feeds were exhibited for feed dealers of Archer-Daniels-Midland Co. at the firm's recent annual Training Institute in Minneapolis.

More than 100 dealers from Minnesota, Wisconsin, Iowa, South Dakota and Nebraska attended the two-day meeting. ADM specialists in sales, animal and poultry nutrition, feed formulation and farm service work served as instructors.

"The institute is designed to refresh dealers' knowledge of these subjects and to bring to them the very latest developments in cattle, hog, poultry and mink feeds," explained Clyde C. Meinhoefer, ADM assistant vice president and manager of the formula feed division.

The new feeds shown were Archer Prime Cattle Supplement, a "nutritionally complete" mink food, and a new soybean oil meal base grinding and mixing concentrate for hogs. According to ADM, the new hog concentrate feed can be mixed with varying amounts of corn and used from start to finish.

In addition to ADM staff members, instructors included Dr. Rodney Briggs, agronomy department, University of Minnesota; R. G. Byers, sales promotion manager for D. K. Baxter Co., and W. J. Orem, of Dr. Salsbury's Laboratories, Charles City, Iowa.

Appointed Squibb Assistant Manager

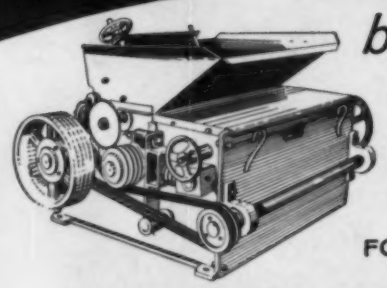
NEW YORK — Thomas H. Divine, special Squibb veterinary representative in the Kansas City sales region, has been appointed assistant manager, veterinary department, in the firm's New York headquarters.

T. H. Divine

A graduate of Oklahoma A&M with a B.S. degree in animal husbandry, Mr. Divine was employed as a county farm agent for six years. He entered the U.S. Navy late in 1943 and during his 17 months' service was engaged in pharmacy.

He went into sales in the pharmaceutical industry at the end of World War II and came to Squibb in 1957. Mr. Divine is married and the father of two daughters.

YOU'LL LIKE THE *QUALITY-BUILT*
W-W GRAIN ROLLER MILL



because

IT PROCESSES
GRAIN
TO GET MORE
GAIN
FOR YOUR CUSTOMERS

Yes, feed processed through a famous W-W Grain Roller Mill, is more digestible, makes livestock eat more, gain more.

It's the *quality* roller mill with outstanding features such as simplified, precision control wheel for easy adjustment, chilled-cast "mill-type" rolls hardened through entire thickness of wall, heavy cast iron frame that last years longer than any other mill. Rolls don't clash when running empty. A convenient roller exchange regrooving service is available at low cost.

Once you see it and compare it, you're sure to buy a W-W. Sizes from 6" to 36" widths.

Write for free literature and attractive time-payment plan.

W-W GRINDER CORP. DEPT. 311 2957 NORTH MARKET WICHITA 4, KANSAS

AFMA AWARD—Dr. Harry R. Conrad (center), Ohio agricultural experiment station, Wooster, is the first of three scientists to receive AFMA awards of $1,000 this year for outstanding contribution to nutrition research. Presenting the check is Dr. Ruel E. Ward, chairman of the AFMA nutrition council and director of feed research, Eastern States Farmers Exchange, West Springfield, Mass. Confirming the selection by the American Dairy Science Assn. at presentation ceremonies at the University of Illinois is Dr. J. K. Loosli (right), chairman of the ADSA awards committee. Dr. Loosli, Cornell University, was recipient of a similar AFMA award in 1950.

New Firm to Construct Feed Mill in Georgia

DOUGLAS, GA.—E. C. Clark and George Stovall, both of Dauglas, have announced plans to build a new feed mill here. The mill will be known as C & S Milling Co. It will be completed in about three months.

E. D. Brooks, also of Douglas, is a member of the firm.

Gulf States Construction Co. has the contract to construct the mill. Sprout, Waldron & Co. will furnish special equipment.

Primary purpose of the mill, which will cost an estimated $150,000, will be to make feeds for Swift & Co. to be sold under Swift's feed label. The mill will make a complete line of Swift's feed and concentrates in both bulk and bags. Pellets and mash will also be available to southern Georgia dealers from this plant.

The mill will be the first one within 100 miles of Douglas devoted solely to wholesale manufacture of a nationally known feed. The mill will be a service facility for local dealers.

MILL PLANNED

VALENCIA, VENEZUELA — Construction of South America's largest feed mill will start soon at Valencia. The 10-story plant is designed to produce a complete line of feeds at the rate of 60 metric tons an hour.

BINGMAN'S *Animal Health Products*

Less Mastitis — Higher Milk Production — More Profits

new approach to Herd Health

Results of tests using BINGMAN'S P-17

During this test period herds were fed BINGMAN'S P-17 at low level.*

BINGMAN'S P-17

WHEN FED AS DIRECTED P-17

Aids in Control of MASTITIS

Aids in Reduction of SCOURS

Aids in Prevention or Treatment of FOOT ROT

Aids in Reduction of RESPIRATORY INFECTIONS

	FIRST TEST			SECOND TEST (in 60 days*)			
Herds Tested	Quarters Tested	Clear	Infd.	Quarters Tested	Clear	Infd.	Percent Cleared
A.	32	21	11	28	28	0	100%
B.	95	76	19	112	108	4	79%
C.	80	34	46	68	55	13	72%
D.	68	52	16	68	64	4	78%
E.	74	38	36	79	72	7	81%
F.	83	69	14	78	76	2	85%
G.	60	34	26	44	39	5	81%
H.	36	27	9	28	26	2	77%
I.	16	11	5	16	15	1	80%
J.	32	16	16	28	25	3	81%
K.	48	41	7	60	59	1	86%
	624	419	205	609	567	42	79.5%

INDICATION OF SEVERITY OF INFECTION

Degree	1st Test	2nd Test
Slight	94	30
Infected (Mastitis)	66	9
Chronic (Mastitis)	45	3
Total	205	42

ASK ABOUT BINGMAN'S P-17 GUARANTEED FEEDING PROGRAM!

BINGMAN LABORATORIES, INC.

A Subsidiary of S & H LABORATORIES, Inc., CALDWELL, OHIO

Note: Sales representatives wanted in many open areas. Write for details.

A. E. BAXTER ENGINEERING CO.

Designers and Engineers for Mills, Elevators and Feed Mills

1311-1315 GENESEE BUILDING BUFFALO 2, NEW YORK

FEEDSTUFFS reprints

The following reprints of articles which have appeared in Feedstuffs may be obtained on order from Feedstuffs' Reader Service Department:

1. **Use of Linear Programming in Feed Manufacturing**—A series of seven articles—by Dr. R. F. Hutton, Pennsylvania State University $1.00
2. **Custom Feed Milling**—a series of five articles—by Al P. Nelson, Feedstuffs special writer 50c
3. **Mobile Feed Milling**—a series of five articles—by Al P. Nelson 50c
14. **Pelleting Feeds for Beef Cattle and Sheep**—by Dr. L. S. Pope, Oklahoma State University 20c
15. **Fifty Years of Progress in Turkey Nutrition**—by Dr. M. L. Scott, Cornell University 20c
16. **Methods of Controlling Bloat in Cattle and Sheep Grazing Legume Pastures**—by Dr. B. F. Barrentine, Mississippi State College 20c
17. **How to Make a Grain Bank Pay**—by John E. Bonnett, Bonnett Feed & Grain Co., Bushnell, Ill. 20c
19. **Dairy Calf Feeding Research**—by Dr. Frank M. Crane, Land O'Lakes Creameries 20c
20. **Bulk Feed Handling Operations**—Reprint of 3 articles by Al P. Nelson, Special Writer for Feedstuffs 40c
22. **Going 'Like 60' for 50 Years in Broiler Nutrition**—by Dr. Gerald F. Combs, University of Maryland 20c
23. **Crop-Use Pattern of Fertilizers in the U.S.**—by J. R. Adams, L. B. Nelson and D. B. Ibach, U.S. Department of Agriculture. Reprint of 9 articles in Croplife; 33 maps, numerous charts $2.00
25. **Protein and Energy Requirements of Chickens in Egg Production**—by Dr. Paul E. Waibel, University of Minnesota 20c
26. **Feedstuffs' 1959 Analysis Table for Feed Ingredients**—by Charles H. Hubbell 20c
27. **What Does Vertical Integration Do to Competition for Feed Sales?**—By Dr. M. E. Cravens, Ohio State University 20c
28. **Enzymes in Animal Feeds**—by Dr. Leo S. Jensen, State College of Washington 20c
29. **Flow Characteristics of Feed Ingredients**—by Paul Berg, Professional Engineer 20c
30. **The Early Weaning of Lambs**—by R. M. Jordan, H. E. Hanke and D. Reimer, University of Minnesota 20c
31. **Animal Fats in Feeds**—a series of five articles by R. W. MacGregor, L. L. Horton, Raymond H. Norton Robert Fleming and Clark B. Rose 50c
32. **The Feeding Value of Pelleted Rations for Fattening Ruminants**—by Dr. J. H. Meyer, University of California 20c

FEEDSTUFFS **P.O. Box 67**
Reader Service Department **Minneapolis 40, Minn.**

Please send .... copy(ies) of the following reprints for which payment is enclosed.

1 2 3 14 15 16 17 19 20 22
23 25 26 27 28 29 30 31 32

(Check code number of reprint desired)

NAME .....

TITLE .....

COMPANY .....

ADDRESS .....

CITY ..... ZONE ..... STATE .....

DEHYDRATED
and
SUN-CURED
ALFALFA MEAL
Pellets • Crumbles
Bagged • Bulk
THE A. B. CAPLE CO.
Toledo 5, Ohio

Yes!
He's looking for some of your dog food made with our complete dog food cereals

★ TOASTED CORN FLAKES ★ KIBBLED CORN
★ TOASTED WHEAT FLAKES ★ KIBBLED WHEAT
★ CORN GRANULES ★ KIBBLED PREMIXES
(Straight or Mixed Shipments)

Carloads — Truckloads — LCL — LTL
LAUHOFF GRAIN COMPANY
PHONE 1800 — Cereals of Quality Since 1862 — TELETYPE 8261
Danville, Illinois

Raymond
MULTIWALL BAGS

RUGGED to serve Farm Needs

Quality controlled to your specifications for trouble-free production in your plant.

RAYMOND BAG CORPORATION
Middletown, Ohio
A division of
Albemarle Paper Mfg. Co.
District Offices:
New York · Chicago · Kansas City
Baltimore

A view of the Armo Mills plant at Lockhart, Texas, converted originally from a cottonseed oil mill.

Texas Firm Adds New Mill Facilities

LOCKHART, TEXAS—Armo Mills is undertaking the installation of a new push-button feed plant. The mill, expected to cost approximately $250,000, is now under construction.

The plant will be a panel board-controlled, batch-mixing operation with a capacity of approximately 100 tons of feed per eight-hour shift, company officials indicated. One man at the electric control panel will direct the entire operation.

Ingredients will be fed into the mixer through a Fairbanks-Morse hopper scale from 20 overhead storage bins. In addition to these bins, holding 500 tons, metal grain tanks for storage of an additional 1,500 tons of grain will be constructed.

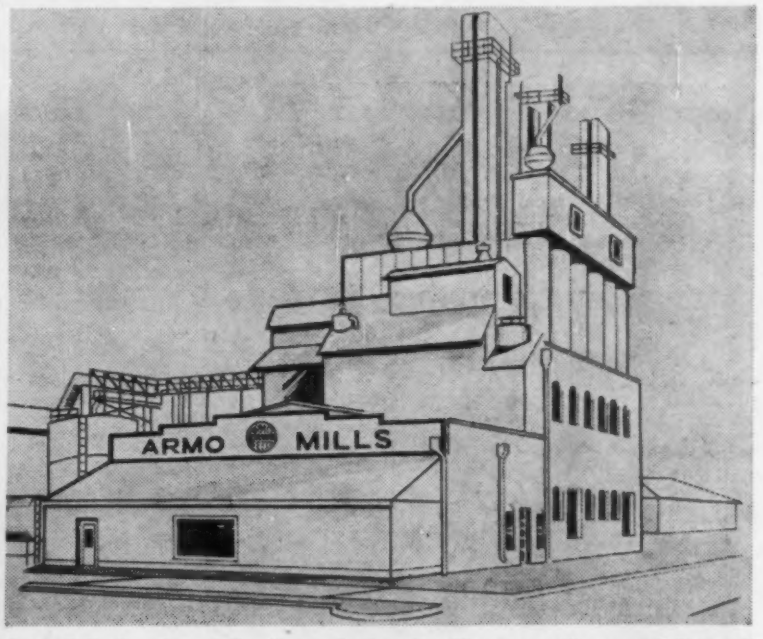
Newton Wilson, Jr., is president of Armo Mills, which entered the feed business in 1945, converting an old cottonseed oil mill into a feed plant. Additional machinery was later installed as the firm expanded, but then it became necessary to modernize and install new automated facilities in the project now under way, officials indicated.

Design of the new facilities is being handled by Hayes & Stolz Industrial Mfg. Co., Ft. Worth. Mr. Wilson said major equipment will include two California Century pellet mills with coolers, shakers and crumble rolls; S. Howes grain cleaner; Jacobson hammermill; Fairbanks-Morse hopper scale; Richmond Gyro-Whip sifter; Hayes & Stolz mixer; two Richardson G-38 automatic baggers; two Union Special sewing machines; two Anthony chop mills; Davis steamer and oat crimper; Marion premixer; electric distributors, elevator legs and dust collectors by Hayes & Stolz.

The company serves dealers and feeders in the surrounding area.

MORRISON AWARD

LOGAN, UTAH — The Morrison Fellowship in Animal Feeding at Cornell University has been awarded to Robert W. Gardner, St. George, Utah, a recent animal husbandry graduate of Utah State University. He will continue work at Cornell for M.S. and Ph.D. degrees. He also recently received a $500 grant from Ralston Purina Co., St. Louis, as the "outstanding junior student in agriculture," and a $100 cash stipend from the Utah Manufacturers & Dealers Assn.



An artist's drawing of the Armo plant as it will appear after remodeling and installation of new milling and storage facilities.

Hoffman
for vitamins
Hoffman-Taff Inc.
SPRINGFIELD, MISSOURI

First Year or Fortieth...

DEALERS LIKE WORKING WITH WIRTHMORE

EXCELLENT TEAMWORK AND COOPERATION

After being in the same feed family for 22 years and seeing the many changes that have taken place in this fast growing industry, it makes us feel justly proud to belong to the Wirthmore family.

In the Wirthmore family you not only watch the advancement and the new highs attained in feed, you are part of the movement in which there is excellent teamwork and cooperation from the top down to the field servicemen and the salesmen.

There is also the assurance of always having a uniform and quality product.

With all these combinations working for us, it is not difficult to meet the keen competition that exists today, to serve the farmer and continue to grow.

Laban Wenger

Horst's Mill, Lebanon, Pa.

INVESTIGATES WIRTHMORE — FINDS PERSONNEL WELL LIKED AND PRODUCTS EFFICIENT

Having decided to go into the feed business for myself, I wanted to represent a company that made quality merchandise and got good results.

I took a trip through the Wirthmore plant at Toledo and liked the care and precision that went into the making of Wirthmore Feeds.

Then I went a step farther. I wanted to see how it rated among dealers and users. I found all the way down the line dealers like the Wirthmore personnel, cordiality and efficiency of the products in the field.

I visited farms and found satisfaction for the results accomplished with the feed and appreciation for the service rendered by the service department.

I hope, in the not too distant future, my customers also will enjoy the results of Wirthmore Feeds and service.

Stephen D Sterling

Sterling Feed Service, Washington Court House, Ohio

40 YEARS WITH WIRTHMORE AND GOING STRONG

We want to let you know of our appreciation of the wonderful cooperation and assistance we have had from your organization.

We have seen a lot of changes in the poultry and dairy business, and have found your organization abreast with the trends, improving its formulas and delivery system; and that these things have been helpful in our growth.

Nels A Palm

Palm Grain Co., Lowell, Mass.

FEED BUSINESS TRIPLED IN THREE YEARS

Wirthmore service is one of the main things that has helped us to build up our feed business. With this service to help back us up we decided to hire an outside salesman.

Systematic farm calls backed up by Wirthmore service and high quality feeds have made it possible for us to triple our feed business in the 3 years that we have had Wirthmore feeds.

Paul S. Hiestand

Hiestand, Inc., Marietta, Pa.

WIRTHMORE®

Home office:
- Waltham, Mass.

Mills at:
- Olean, N. Y.
- Toledo, Ohio
- Brattleboro, Vt.
- St. Albans, Vt.
- Concord, N. H.
- Bridgewater, Mass.
- Preston, Md.
- Hickory, N. C.

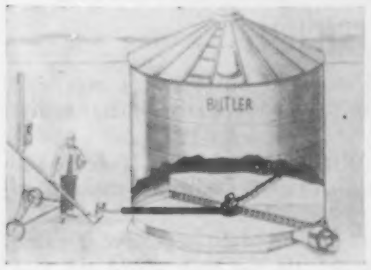
WORTH LOOKING INTO

NEW PRODUCTS • NEW SERVICE • NEW LITERATURE

DESCRIPTIONS OF NEW AND IMPROVED PRODUCTS AND SERVICES PROVIDED BY MANUFACTURERS AND SUPPLIERS ARE PRESENTED IN BRIEF FORM. FOR ADDITIONAL INFORMATION, PLEASE USE THE ACCOMPANYING COUPON.

No. 7581—Automatic Unloader

An automatic unloader that rapidly empties round, metal grain bins without shoveling or working inside the bins has been announced by Butler Manufacturing Co. The bin unloader consists of a flexible "sweep auger" with dust proof electric motor that operates inside the bin and a "sub-floor" auger that inserts a 7 in.



tube under the bin floor. The sub-floor auger draws all flowable grain out of the bin through an opening in the center of the floor. Then the flexible sweep auger takes over and pulls the remaining grain to the center floor hopper and out of the bin. A Butler automatic bin unloader can be installed in 14 ft., 18 ft. and 21 ft. diameter metal bins. For more information about the unit check No. 7581 on the coupon and mail.

No. 7582—Molasses Feed Scale

Standard and optional features of the GB-38, Teflon-lined automatic scale for high-speed handling of molasses feeds, are described in a four-page bulletin recently re-issued by Richardson Scale Co. Data on capacity and accuracy are supplied, and details of construction are set forth in the color publication. Case histories are cited in support of claims of increased production and savings in labor effected by adaptation of the unit, company literature said. Four photographs and a cartoon drawing are used to illustrate the bulletin. For copies check No. 7582 on the coupon and mail.

No. 7579—Proportioning Pump

A plunger-type, small capacity proportioning pump for chemical treating of small, low pressure boilers has been introduced by B-I-F Industries, Inc. The Proportioneers Model 1107 Adjust-O-Feeder provides injection of boiler treatment chemicals in boilers and is suitable for treating make-up water or for constant feeding at low rate, the company said. Design features include adjustable stroke length to five feed rates of from 0.2 GPH into 300 lb. maximum discharge pressure. "Vane Guide" check valves are self-purging, straight-through design. Construction details include steel cylinders and check valve bodies, and stainless steel plunger, ball checks and seats. The pump operates on 110 volts, 60 cycles, and has a built-in reduction gear box and thermal overload protection. An instruction booklet outlining installation, operation and maintenance is included with the pump. To secure details, check No. 7579 on the coupon and mail.

Send me information on the items marked:

- ☐ No. 7564—Flat Belt Pulleys
- ☐ No. 7574—Temperature Recording Unit
- ☐ No. 7578—Extractor Magnet
- ☐ No. 7579—Proportioning Pump
- ☐ No. 7580—Booklet on Pellet Mills
- ☐ No. 7581—Automatic Unloader
- ☐ No. 7582—Molasses Feed Scale
- ☐ No. 7583—Bin Vibrator

(PLEASE PRINT OR TYPE)

Others (list numbers) .....

NAME .....

COMPANY .....

ADDRESS .....

——— CLIP OUT—FOLD OVER ON THIS LINE—FASTEN (STAPLE, TAPE, GLUE)—MAIL ———

FIRST CLASS PERMIT No. 2
(Sec. 34.9, P. L. & R.)
MINNEAPOLIS, MINN.

BUSINESS REPLY ENVELOPE
No postage stamp necessary if mailed in the United States

POSTAGE WILL BE PAID BY—

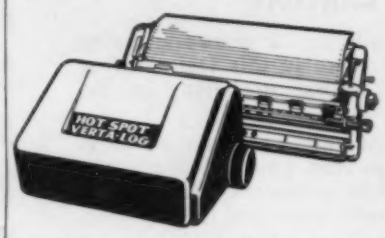
Feedstuffs

P. O. Box 67

Reader Service Dept. Minneapolis 40, Minn.

No. 7574—Temperature Recording Unit

Hot Spot Detector, Inc., has announced an economy unit for recording stored grain temperatures. The new device, the "Verta-Log," will be available as an optional feature on Hot Spot's automatic remote control instrument. "Verta-Log is a secondary recorder and will be used purely as an economy unit," the company said. "It does not contain many of the fine features of the Hot Spot Type-O-



Matic, which is an electronic digital recorder and embodies the use of the electric typewriter." The Verta-Log prints vertical records of temperatures indicated at each thermocouple in each cable in the heat detector system. The new device is similar to a calculator or adding machine. It has automatic or manual control and multiple digit entry. For more information, check No. 7574 on the coupon and mail.

No. 7564—Flat Belt Pulleys

Less slippage, longer belt life and quieter operation without the use of belt dressings are features claimed for the Neverslip line of flat belt pulleys offered by Republic Engineering & Manufacturing Co. The pulleys have a corrugated surface which is said to prevent entrapment of air be-

tween the belt and pulley surface. The pulleys can be used for replacement of original equipment in any flat-belt power transmission but are particularly adaptable to short center distances and where intermittent machine loads are encountered as in hammermills and grinders, company literature said. Almost all sizes of pulleys are carried from 3½ in. to 16 in. in diameter. For more information, check No. 7564 on the coupon and mail.

No. 7578—Extractor Magnet

The Magni-Power Cross Belt Extractor removes metal contamination without coming in contact with the flow line, then drops waste in a self-cleaning operation that requires no manual labor, Magni-Power Co. announced. The magnetic field extends over the complete width of the carrier belt, so no tramp iron passes undetected. The extractor can be used anywhere that spout, chute, flat or trough conveyors are required. The stainless steel housing with bolt and welded construction protects all components from damage or dirt accumulation. Permanent magnetic elements are guaranteed for the life of the machine. For more information, check No. 7578 on the coupon and mail.

No. 7580—Booklet on Pellet Mills

The availability of a 16-page, two-color brochure on pelleting has been announced by Sprout, Waldron & Co., Inc. The booklet traces the reasons for growth of pelleting and the history of pellet mill design. The booklet describes graphically and in text how pellets are formed, and presents a detailed analysis of what to look for when evaluating a pellet mill. The booklet discusses cooling, drying, crumbling, cleaning and grading of pellets. For copies of the booklet, check No. 7580 on the coupon and mail to this publication.

No. 7583—Bin Vibrator

A heavier unit has been added to the Eriez Manufacturing Co. line of Hi-Vi bin vibrators. Available in two types, the units are called the V3A-50P and the V3A-50S. The only difference in the two models is that the 50P is of the "impact" type and the 50S is of the semi-noiseless type, having one of the impact elements semi-resilient to provide cushioned impact. The new additions are for use on bin walls of ¼ in. maximum thickness with a capacity of 50 cu.

ft. The units' action simulates the blows of a hammer, providing the vibratory motion at the point where the material is sticking or clogging. While no control box or rectifier is needed to provide for power conversions from DC to AC, a simple control box is recommended so the units can be adjusted to day-by-day variations in product or loading conditions. For details check No. 7583 on the coupon and mail.

Also Available

The following new products have been described in previous issues of Feedstuffs and information about them may still be obtained by jotting the appropriate number on the coupon and forwarding it to Feedstuffs.

No. 7523—Material study report, Schlumberger Well Surveying Corp.

No. 7524—Adjustable conveyor, Minneapolis Sewing Machine Co., Inc.

No. 7525—Animal feeding bulletin, National Cottonseed Products Assn.

No. 7526—Bin vibrator catalog, Syntron Co.

No. 7527—Bulletin on pellet mill, Sprout, Waldron & Co., Inc.

No. 7528—Feed fortification combination, Specifide, Inc.

No. 7529—Vertical hammer mill, Sturtevant Mill Co.

No. 7530—Bulk handling bulletin, Ripco Air Systems, Inc.

No. 7531—Medium-size corn sheller, Belle City Manufacturing Co., Inc.

No. 7532—Attrition mill data sheet, Munson Mill Machinery Co.

No. 7533—Bucket elevator bulletin,

K. J. Pettapiece J. H. Voneman

FIELD ENGINEERS—S. Howes Co., Silver Creek, N.Y., has announced the appointment of two field engineers. They are Kenneth J. Pettapiece, who will represent the firm in New York, and James H. Voneman, who will work in the New England territory. During the past several years, Mr. Pettapiece has specialized in the design, engineering and manufacture of Eureka mixing, cleaning and processing equipment. Mr. Voneman studied machinery and equipment at Ohio State University, and has spent the past year working in the engineering and manufacturing of Eureka equipment for the feed market.

Larro Sales Specialist Named for California

SAN FRANCISCO—John A. Spencer, manager of the General Mills feed store in Union Gap, Wash., has been appointed to a newly created post of sales specialist for Larro beef cattle, sheep and swine feeds in northern and central California, by Burton W. Roberts, general manager of General Mills' Sperry (western) Operations. Mr. Spencer has directed the Union Gap operations since he joined General Mills' feed sales organization more than five years ago.

Receives Award

COLLEGE PARK, MD.—J. R. Hargreaves, secretary and treasurer of the Caroline Poultry Farms, Inc., Federalsburg, since 1945, has been awarded a certificate of merit in agriculture. He received the award from Wilson H. Elkins, president of the University of Maryland.

Mr. Hargreaves is the immediate past president of the Delmarva Poultry Industry, Inc., Georgetown, Del., and is presently serving as second vice president of the Poultry and Egg National Board, Chicago. He also serves as director of the National Broiler Council, Richmond, Va.

AWARD PRESENTATION—J. D. Sykes (second from right), vice president of Ralston Purina Co., St. Louis, is shown presenting a $500 Purina award to Lawrence Schnake, a junior in poultry husbandry at the University of Missouri. At left is Dr. John H. Longwell, dean of the university's college of agriculture, and at right is Dr. Elmer Ellis, president of the university.

Sprout, Waldron & Co., Inc.

No. 7534—Feed mill bulletin, Prater Pulverizer Co.

No. 7535—Portable mill, mixer, Peerless Equipment Co., Inc.

No. 7536—Bulk feed bin, Sioux Steel Co.

No. 7537—Package monitor checkweigher, Thayer Scale Corp.

No. 7538—Five-ton storage bin, Leach Manufacturing Co.

No. 7539—Screen separator bulletin, Southwestern Engineering Co.

No. 7540—Salt box designs, International Salt Co.

No. 7541—Financing, leasing program, Simonsen Manufacturing Co.

No. 7542—Bulk feed handler, Productive Acres Manufacturing Co.

No. 7543—High-speed blender, Strong-Scott Manufacturing Co.

No. 7544—Dual roll drive, Moore Dry Dock Co.

No. 7545—Pneumatic vibrator, Cleveland Vibrator Co.

No. 7546—Barge unloading conveyor, Andrews Machine Co.

No. 7547—Bulk feed unit, Ripco, Inc.

No. 7548—Electronic weight detector, Fairbanks, Morse & Co.

No. 7549—Equipment catalog, Burrows Equipment Co.

No. 7550—Moisture computer, F. H. Peavey & Co.

No. 7551—"Dual-Speed" pellet mill, California Pellet Mill Co.

No. 7552—Mixer data sheet, Munson Mill Machinery Co.

No. 7553—Auger elevator, Koyker Manufacturing Co.

No. 7554—Bulk scale bulletin, Richardson Scale Co.

No. 7555—Surge bin, Rapids Machinery Co.

No. 7556 — Equipment catalog, Seedburo Equipment Co.

No. 7557 — Service plan brochure, Wm. Davies Co., Inc.

No. 7558 — Batch mixer bulletin, Gruendler Crusher & Pulverizer Co.

No. 7559—Grain drying bin, Lennox Industries, Inc.

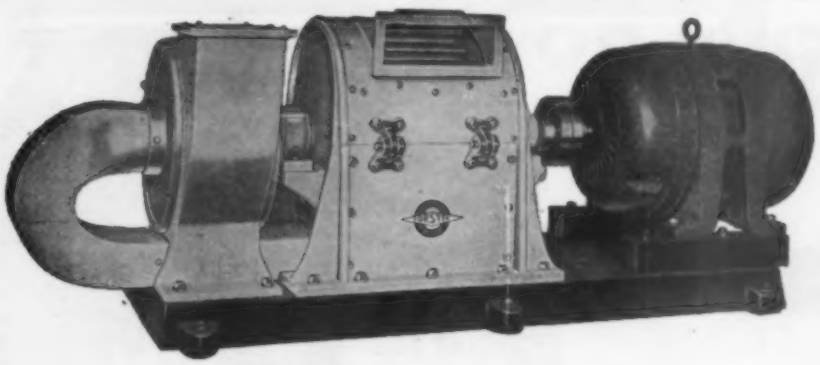
DEVOLD
Serving Mills & Breeders For Over 30 Years

Devolkod ® Vitamin Oils (Fortified Cod Liver Oils)
Devolkod ® Non-Dest. Cod Liver Oil U.S.P.
Devold Vitamin A & D Feeding Oils
Devold Vitamin A Oils
Peder Devold Wheat Germ Oil

"Stabilized" From Can to Carloads
ORegon 9-8400

PEDER DEVOLD OIL CO.
Division of Chas. L. Huisking & Co., Inc.
417-FM Fifth Avenue
New York 16, N.Y.

FORSTER HAMMER MILLS
Serve Better . . . Last Longer!

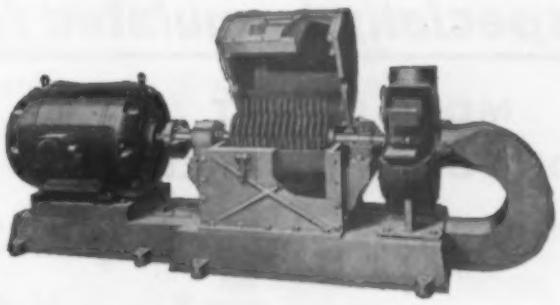


The Aristocrat of the Milling Industry

☆ Heavy construction ☆ Continuous service ☆ Carburized hammers
☆ Extra-large main shaft of alloy ☆ Shock-proofed steel
☆ Vibrationless performance ☆ Cast alloy steel fan

Proved by thousands of installations

Want quality? dependability? low maintenance? Specify a Forster Hammer Mill for your needs. Here's the mill that's proved itself all over the world. Forster Hammer Mills have the precision engineering of a fine watch, with every part machined to give a smooth, vibrationless performance. Forster Mills have the stamina to take the roughest punishment . . . through the years. A true balance of air, screen surface and power to insure lasting efficiency. There's a Forster Hammer Mill that's just the right size to most efficiently serve you. Call or write for information, now.



● Sizes from 15 to 125 H. P.

At Your Service . . . We Fly Our Own Planes

Send for complete details, today

FORSTER MANUFACTURING COMPANY
ADA, OKLA FEderal 2-6020

FORSTER MANUFACTURING CO., ADA, OKLA.
Gentlemen:
Please send complete details on Hammer Mills
Name .....
Company Name .....
Address .....
City ..... State .....

Feed Service BULLETIN BOARD

IDEAS TO HELP YOUR CUSTOMERS

Cooler Water Supply

Cooler, more accessible water for livestock during hot summer months is easier to provide than one might think. One way, says Bruce McKenzie, Purdue University extension agricultural engineer, is using plastic water pipe in conjunction with automatic fountains.

The water pipe he speaks of is made of black plastic, commonly known as polyethylene. It's light, durable and easy to install. Available in long coils, the pipe can be installed underground—protected from direct sunlight. In addition to the usual methods, the pipe can be fed into an underground slot made by a subsoiler or into a field plow furrow.

Installation at frost-free depth is not essential, he says, if the pipe is for summer use only, and if water pressure is turned off during freezing weather. Mr. McKenzie notes that plastic pipe should never be installed above ground because sunlight causes rotting.

Water temperatures may reach 120° on a hot summer day. This is where the automatic fountain counts. It holds a small amount of water, replaced automatically as an animal drinks with cool water from the underground supply. The fountain can be moved to drylot for winter use.

◆

Grade Information

A University of Minnesota study shows that most swine producers never get grade information from buyers and often have no idea why their hogs brought a certain price. Yet, most markets pay more for high-grading hogs as an incentive for meat-type production.

Economists who conducted the survey of commission firm salesmen and packer buyers say it's essential that farmers know why their hogs bring a certain price, and they recommend that if the farmer doesn't go to the market himself, the grade should be on the sales slip. Otherwise, the producer may blame a generally poor market or the commission salesman for a low price. He may not realize his hogs were too fat, overweight or underfinished.

The survey indicated that so-called "merit buying" may be more of a talking point to attract farmers than a standardized grading system. And there was evidence that commission firms and packer buyers aren't using the same criteria.

Supposedly, commission men can judge the value of a hog by looking at it. Yet, 5 of the 14 salesmen interviewed said they had no idea of the accuracy of their estimate. Nine were not sure how accurately they could estimate carcass yield from a live hog, and several said their estimates of grade and yield were less accurate than buyers' estimates, since buyers can see the carcasses after slaughter. Packer buyers interviewed thought their live estimates of grade and yield were "very accurate."

◆

Bituminous Feed Lots

Though not as permanent as concrete, there is much to be said of bituminous paving as a surface for livestock yards.

W. P. Annable, University of Massachusetts agricultural engineer, lists these advantages of bituminous paving:

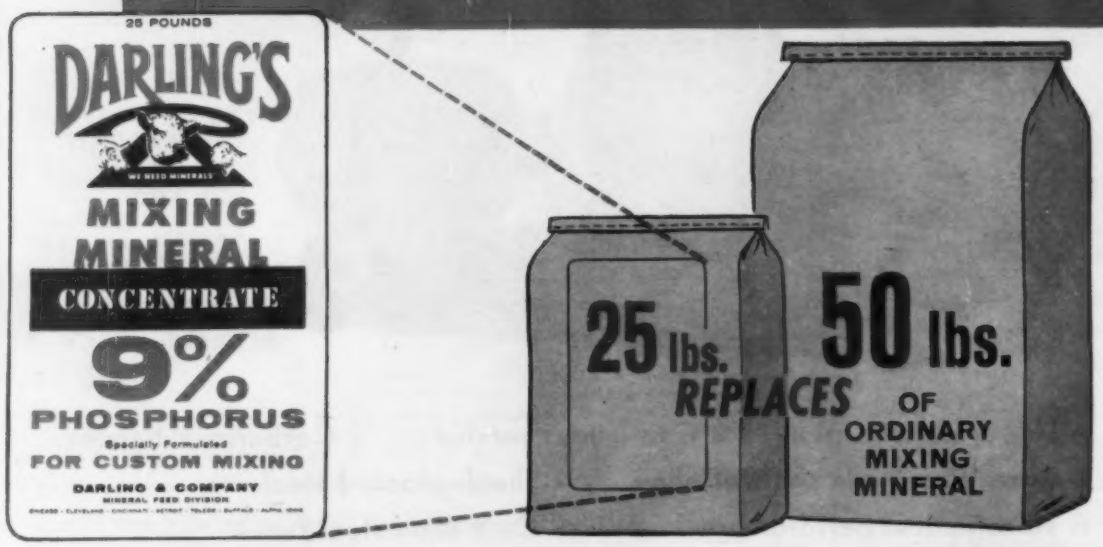
- Less expensive initially than concrete paving.
- Comparatively less time to emplace.
- No forms needed for laying.
- Surface is joint-free.
- Flexibility lets surface bend under load.
- Its dark, heat-absorbing surface hastens melting of snow and ice.
- When properly installed, bituminous surface is hard and rugged.

Two main points to watch in paving with bituminous concrete are drainage and sub-base.

Mr. Annable says good drainage is necessary to assure a dry sub-base and prevent heaving during freezing weather. The area to be paved should have good natural drainage or be sloped away from the building at the rate of 2 ft. per 100 ft. of length. At least 12 in. gravel should be provided for the sub-base.

After the surface has been used about 10 years, it may need another

NOW A MIXING MINERAL CONCENTRATE



especially formulated for custom mixing!

MORE PROFIT FOR YOU, THE DEALER

★ higher margin per ton
★ saves *one-half* of your freight bill
★ saves *one-half* of your storage space and costs
★ small, compact 25 lb. bag for easier handling
★ store *twice* the supply handy to your mixer

A BETTER BUY FOR YOUR CUSTOMER

★ ***9% phosphorus***—up to *three times* the phosphorus content of ordinary mixing minerals
★ *all* the phosphorus highly available to livestock
★ nutritionally sound, with a calcium-phosphorus ratio based on latest research
★ includes all necessary trace minerals
★ only top-quality ingredients

From One Manufacturer...
A COMPLETE MINERAL PROGRAM

DARLING'S Mixing Mineral Concentrate
DARLING'S *Free-Choice* Mineral Mix
DARLING'S *Weather-Resistant* Mineral Block

IMPORTANT!
If your distributor does not carry DARLING's complete line of Minerals, phone collect to YArds 7-3000, Chicago, for name of DARLING's Mineral distributor in your area.

DARLING & COMPANY
MINERAL FEED DIVISION
Union Stock Yards • Chicago 9, Illinois

Grow 'em BIG

Make More MONEY

with broilers based on Nichols 108s

Here's how they do it in Virginia —

Number started 5500
Livability 99%
Age sold.....9 wks. 3 days
Ave. weight.....3.75 lbs.
Feed conversion 2.45

Here's how they do it in Canada —

Age sold.....9 wks. 2 days
Ave. weight.....3.81 lbs.
Feed conversion 2.38

In at least 3 out of every 4 split house tests, under commercial conditions, broilers based on Nichols 108s will lead in **growth** and **feed efficiency.**

Are *you* content with second best?

Nichols Incorporated

Exeter, New Hampshire

RESEARCH MAKES THEM BETTER
NICHOLS

top (or sealer) layer. Repairs may be made by excavating broken portions, refilling with hot mix and rolling or tamping into place. Mr. Annable says cold mix repairs are not as durable.

If a contractor does the job, cost of a bituminous paved yard should run about $3 sq. yd. for the complete job—from excavation to final rolling. The farmer can cut this cost by doing part of the work himself. If the excavation, gravel-filling and compacting have already been done, the rest of the job will run about $1.50-$2 sq. yd.

◆

Cut Hay at Right Time

G. C. Anderson, University of Idaho extension dairy specialist, says there is a direct relationship between the amount of bloom on alfalfa or clover fed and the milk check received by the dairy farmer.

Cows like hay cut at just the right time, Mr. Anderson notes. That is when one stem out of every 10 in the field has a bloom on it. Let it go past that stage, and the cows' liking for that particular cutting of hay goes down. This dislike will show up in reduced milk and butterfat production.

◆

Egg 'Incentive Clauses'

Two "incentive clauses" in egg production contracts now becoming widespread in southern states could be used as standards for all poultrymen, says Prof. Charles Petersen, University of Idaho poultry husbandman.

He notes that most contracts give the contractor or program operator the right to remove the flock if the farmer or flock manager fails to handle the birds satisfactorily. Another clause takes stock of the flock at the end of the laying year, which is usually the end of the original contract. If the feed cost per dozen eggs is too high, the contract may not be renewed.

"Those are the measures of successful operation that we could all use in the egg-production business," Prof. Petersen declares. "If we're wasting feed or doing a poor job of management generally, it would be good to lay down some new rules for ourselves as poultrymen. The only difference between producing eggs for ourselves and producing them for a contractor is that as independent poultrymen we are both owners and managers. Either way, we have to make the flock pay dividends."

BULK TRUCK BOUGHT

SHREVEPORT, LA.—The Feeders Supply Co. has bought a six-ton truck for making bulk feed deliveries, according to E. F. Carter, a co-owner of the firm. The truck has two equal compartments and will be used in delivering both swine and poultry feed to customers.

Arkansas Egg Operation Expands

BENTON, ARK.—The Ideal Egg Co., Benton, a new project owned by the Saline County Feed Store, has announced plans for the expansion of its wholesale distribution of graded eggs, and the enlargement of its commercial laying flock.

Esmer Shell and David Crawford, owners of the feed store and egg company, said they have recently secured 13 new retail grocery stores as additional outlets.

The partners are feeding more than 40,000 commercial hens, and are planning to increase the number to 50,000 in the near future.

They handle the egg program under two different arrangements. They own some of the laying flocks outright, and they furnish the feed and aid in management of the flocks of a number of other producers.

"Laying flocks in Saline County are increasing steadily," said Mr. Shell. "We plan to obtain our share of the business."

At the present time, more than 30 persons are employed in the over-all operation. Many phases of the program are handled by automation. Feed is delivered in bulk trucks and is augered into bins with electrically-powered augers, and eggs are gathered by a small, electrically-operated machine.

While egg prices have been depressed in recent weeks, the feed store operators believe the market will strengthen when the hot weather forces "family flocks" out of production.

Illinois Feed Group Honors FFA Members

CHICAGO—For the second year in a row the Illinois Feed Assn. has sponsored a Future Farmers of America award event honoring 125 district FFA livestock winners and their instructors.

More than 200 persons gathered at the Illinois State Fairgrounds in Springfield to attend a barbecue chicken dinner, at which time certificates of achievement were presented to outstanding young agricultural students in five areas of animal production. These included dairy cattle, beef cattle, poultry, swine and sheep.

The winners were chosen by each district's vocational agricultural instructor on the basis of their proven ability and records of accomplishment in livestock or poultry management during their enrollment in vocational agriculture.

The program featured a talk by five of the FFA winners, and by Ivan R. Miller, Crawford County Farmers Exchange, Robinson, Ill., IFA president. Robert Pevahouse of Springfield was dinner chairman.

IDAHO GRAIN FIRM SOLD

ST. ANTHONY, IDAHO—The Jack Thomas Grain Co. at St. Anthony has been purchased by Ray and Orme Jorgensen. The firm handles grain, feed and fertilizers. Mr. Thomas purchased the business, formerly Miller Bros., about three years ago.

Processors such as Trainin Egg Company of Kansas City require a large supply of high quality eggs every month of the year.

Interested in

EGG QUALITY *plus* **GREATER WEIGHT?**

Large eggs and a high percentage of firm albumen seldom go hand in hand, so consequently processors are pleased by the exceptional performance of K-137 Kimberchiks. It's pretty well known now that among all nationally available strains entered in last year's Random Sample Tests, K-137 Kimberchiks scored highest for *albumen quality* as well as for the percentage of *large and extra large eggs* produced.

So if you are concerned with quality control, or with yield, you will probably want to locate flocks of K-137's. Upon inquiry we will put you in touch with the man who can help you, the authorized Kimberchik hatcheryman in your area.

KimberCHIKS,® Inc.

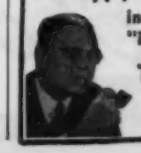
P. O. BOX 8 · NILES, CALIFORNIA · SYcamore 3-4521

P. O. BOX 840 · POMONA, CALIFORNIA · NAtional 9-3048

Use Your Own Salt and Calcium with Herman Nagel's **Formula B** PHOSPHORUS CONCENTRATE WITH TRACE MINERALS

...to Supply Every Needed Mineral

in a form so soluble "It melts on your tongue."



The HERMAN NAGEL Co.
53 W. Jackson Blvd.
Chicago 4, Illinois

THE MAN WITH THE ★ MULTIWALL PLAN

UNION
PACKAGING SPECIALIST
WALTER STALER

helps packer cut his Multiwall costs by $60,000

Union Packaging Specialist Walter Staler is an economy expert. His Multiwall customers can vouch for it. One of them—a Midwest packer—recently asked him to analyze his bagging operation. Savings to the company are expected to hit $60,000 a year!

The analysis, made through Union's 5-Star Packaging Efficiency Plan, showed that the basis weight of each bag could be reduced by 20#. Another recommendation: Standardize all Multiwall styles and sizes to improve inventory control and simplify purchasing.

Union Multiwall Recommendations are based on this 5-Star Packaging Efficiency Plan

- DESIGN
- EQUIPMENT
- CONSTRUCTION
- SPECIFICATION CONTROL
- PLANT SURVEY

Union also suggested simplifying bag printing by changing it from two-color on both sides to two-color on one side. And, switching from a full white to a less expensive semi-bleached sheet. These improvements, together with new work and copy created by Union's Art Department, resulted in a more attractive, more economical package.

This $60,000 savings story is another example of what can happen when Union's 5-Star Plan goes into action. Why not put it to work in your plant?

Better Multiwall performance through better planning

union camp ®

UNION'S PACKAGE ENGINEERING DEPARTMENT will study your Multiwall bagging methods and equipment and make appropriate recommendations, regardless of the brand of Multiwalls you are now using.

UNION MULTIWALL BAGS
UNION BAG-CAMP PAPER CORPORATION
233 BROADWAY, NEW YORK 7, N. Y.

Cottonseed Meal Markets Widened Through Research

WASHINGTON — Improved processing techniques developed through nearly 20 years of cooperative research have widened markets for cottonseed meal by extending its use as a high-protein feed for poultry and swine, the U.S. Department of Agriculture reports.

Prior to 1947, use of cottonseed meal for livestock rations was limited largely to cattle because it contained gossypol, a pigment that is toxic to poultry and swine.

Although variable from year to year, the new market for cottonseed meal has been estimated by USDA to have reached 300,000 tons annually in recent years. Largest market for the improved cottonseed meal at the present time is in California where, in 1958, an estimated 200,000 tons went into poultry rations.

Even when fed to laying hens at low, non-toxic levels, gossypol in unimproved cottonseed caused egg yolk discoloration. The improved cottonseed meals, however, can be fed at levels up to 10% of the total diet of hens with no adverse effect on the yolks of eggs produced for the fresh egg market.

Improvement Started in 1940

USDA's Agricultural Research Service began work early in the 1940's to improve cottonseed meal. Studies of the chemical and physical properties of cottonseed and of the pigment glands containing gossypol gave scientists of the ARS Southern Utilization Research & Development Division, New Orleans, an understanding of the role played by gossypol and laid the groundwork for producing cottonseed meal with a low gossypol content.

The amount of free gossypol in cottonseed meal is influenced by conditions of processing the seed and the variety of cotton. Moist cooking, for example, aided in the production of meals low in free gossypol. However, research demonstrated that meals cooked at high temperatures were often not only low in free gossypol, but also in protein quality, because of the effect of high heat on essential amino acids.

Further study indicated that glands containing gossypol could be ruptured during processing by several means, and a large part of the freed toxic material could then be inactivated at much lower temperatures than was previously thought possible. Low processing temperatures favor high protein quality in the meal.

Cooperative Studies

The National Cottonseed Products Assn., state agricultural experiment stations and industry have cooperated in large-scale studies to evaluate and establish the proper conditions for commercial production of improved cottonseed meal. However, achievements to date do not complete the research required to realize the full feeding potential of cottonseed meals, USDA officials said.

Scientists at the southern laboratory are now working to devise commercial processing techniques that will preserve the original quality of the cottonseed protein, and to solve other problems connected with the feeding of cottonseed meal to swine and poultry.

D. M. Styron F. T. Fjellman

SALES APPOINTMENTS—Appointment of two feed supplement sales representatives has been announced by the Borden Special Products Co., New York. They are Paul T. Fjellman and D. M. (Mike) Styron. Mr. Fjellman joins Borden's after 20 years of sales experience with the Archer-Daniels-Midland Co. of Minneapolis. He will be located at Borden's Minneapolis office, which takes in the territory of the north central states. Mr. Styron, formerly a fieldman and nutritionist with the Tarkio Molasses Feed Co. of Kansas City, has wide experience in agriculture and feed sales. His headquarters will be in Kansas City, and he will cover the west central states.

Hayfer Production Set

REDMOND, ORE.—The Redmond Packing Co. will soon begin producing Hayfers, according to manager Jack Christensen. He says the Sumner Foragizer, Hayfer making machine, has been received at the Redmond plant, has been tested, and will soon be put into operation. Hayfers are alfalfa wafers used in feeding.

MILL BEING CONSTRUCTED

ACKLEY, IOWA—A new feed mill is being built at the Farmers Co-op Elevator at Ackley. The building is located south of the present warehouse. It will be 26x44 ft. and will have an 18-in. hammermill.

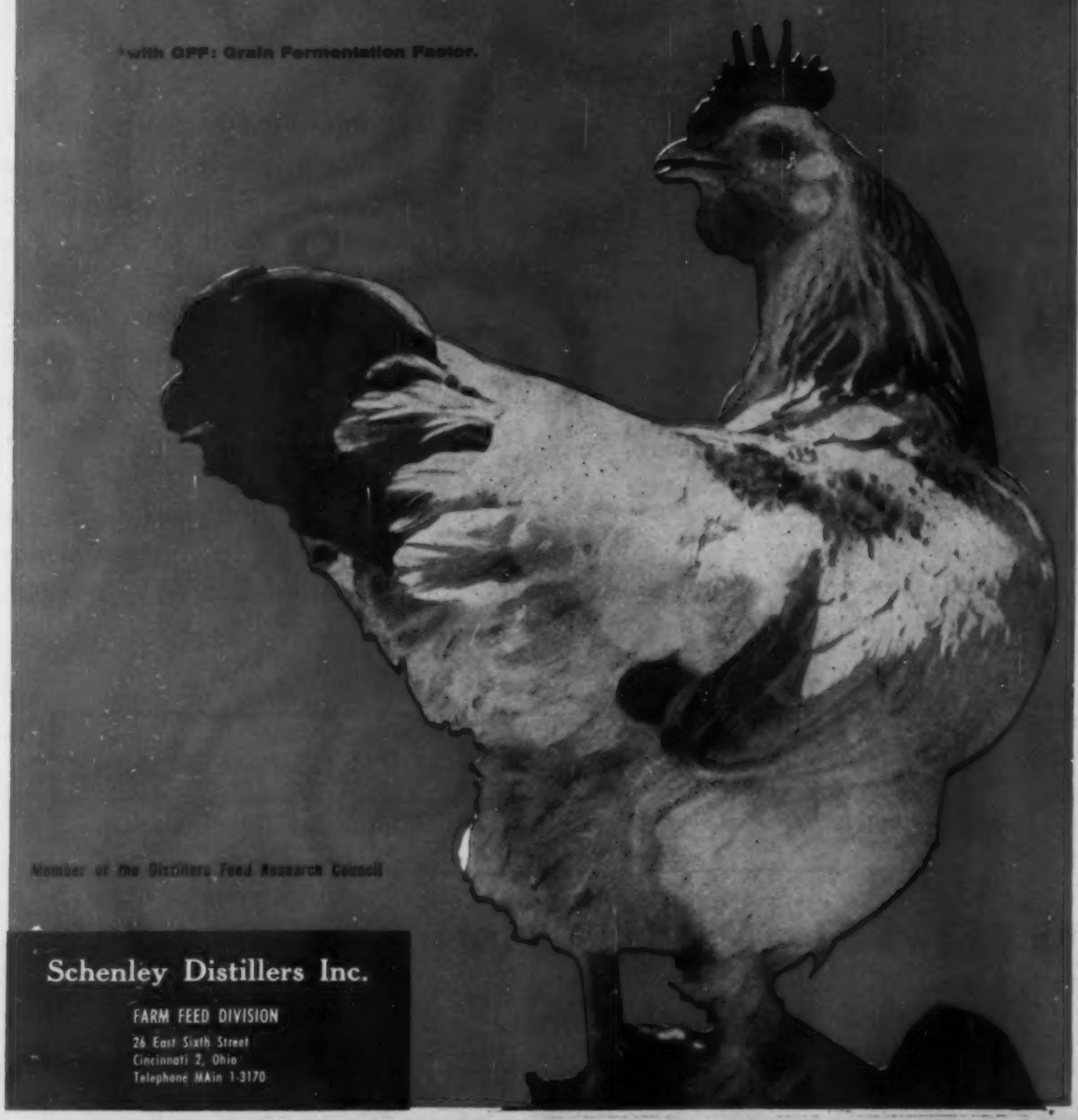
Why does a chicken cross the road?

Naturally to get its Mixed Feed and naturally it is mixed with SOLUDRI,
SCHENLEY'S DISTILLERS DRIED SOLUBLES *
the popular protein supplement for chickens. It is low in moisture and fibre and high in fat and energy.

Another fine product of Schenley's Farm Feed Division:
SCHENLEY CORN DISTILLERS DRIED GRAINS *
They are especially valuable in feeds for dairy cows to raise milk production when used with low fat ingredients.

All Schenley Products are always fairly and realistically priced. Write or wire today.

*with GPF: Grain Fermentation Factor.



Member of the Distillers Feed Research Council

Schenley Distillers Inc.
FARM FEED DIVISION
26 East Sixth Street
Cincinnati 2, Ohio
Telephone MAin 1-3170

This 100 pound container of

Hetrogen K*

will provide positive vitamin K fortification to 400 tons of your poultry feed for only 4½¢ per ton

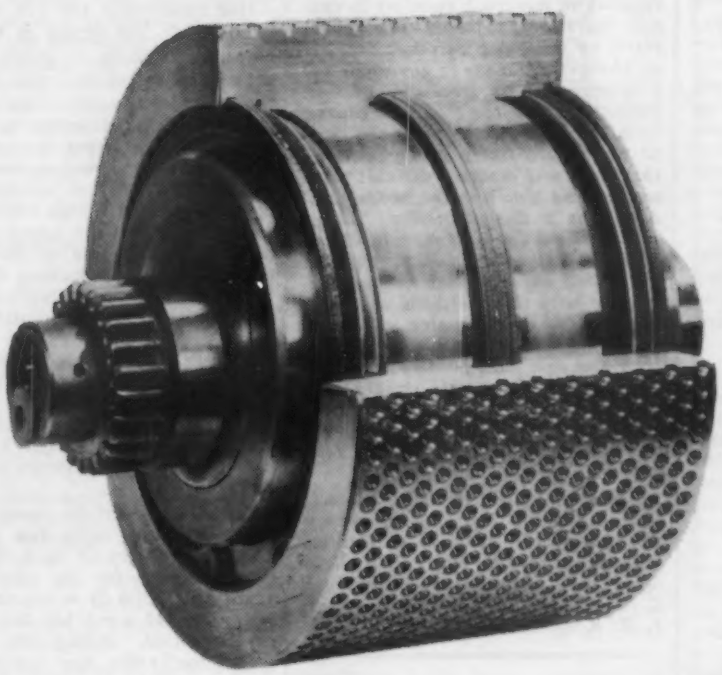
Fast, effective protection against hemorrhagic disease

HETEROCHEMICAL CORPORATION
111 E. Hawthorne Avenue
Valley Stream, Long Island, N.Y.
LOcust 1-8225

*U.S. Patents 2,331,908 & 2,367,302

TO THE FEED INDUSTRY OF AMERICA . . . *Thanks*

For Your Overwhelming Acceptance of our growing line of Feed-Milling Products!



DIMPLE-FACED

ASSEMBLY

LANDERS ***DIMPLED-FACED PELLET MILL ROLL ASSEMBLY with DOUBLE SEALS . . .***

The ONLY ROLLER made with TWO SEALS on each end of the shaft . . . for MORE PRODUCTION at LESS COST TO YOU!

H. S. Landers, **PRESIDENT**

LANDERS MILL MANUFACTURING COMPANY

LANDERS

MILL MANUFACTURING CO.

207 East Broadway - Fort Worth, Texas

Why Grain Men Prefer

Owner's viewpoint

ARID-AIRE

GRAIN DRYERS

"I would like to say that our ARID-AIRE grain dryer has given us complete satisfaction, and that is the reason why we have bought the second and now have the third on conditional order."

E. L. RICKEL, *President*
Rickel, Inc.
Kansas City, Missouri

Repeat sales prove ARID-AIRE owners are well satisfied with operation, economy and dependability.

Write for details of Trial Plan and free folder.

DAYCOM, INC.

Dept A 810 Third Ave. N.E., Mpls. 13, Minn.

KAFIR & MILO

Largest Dealers in Southwest

MID-CONTINENT GRAIN CO.

Board of Trade VIctor 2-4671

KANSAS CITY, MO.

OR IS IT?

While no grower will stand for thieves stealing his birds, a number of growers still stand by and take a chance of losing a large portion of their flocks through not vaccinating. And taking this chance is completely unnecessary. DPL has a vaccination program that is proven, easy to carry out and a very low cost insurance against a 'thief' that may strike anywhere, any time. Don't take chances. *Write us today for your free literature on DPL vaccines and biologicals and for direct-to-you prices.*

Delaware Poultry Laboratories | Millsboro, Del

DPL

Analysis Offers Clues to . . .

Where the Feed-Livestock Industry Is Headed

By Prof. J. Carroll Bottum
Purdue University

Present indications point to an increasing domestic demand for our livestock products during the next several years. Nevertheless, if no changes are made in governmental programs and if livestock cyclical patterns follow their normal course, livestock marketings during the 1960-62 period are likely to be so large that they will create a difficult price and income situation for producers. This situation is being pointed out so that individual producers may keep it in mind in making adjustments, and in order that citizens are aware of it as they think through and possibly modify governmental farm programs. To the extent that individual adjustments are made which are not normal, and to the extent that governmental farm policies are modified from those presently in force, the situation will be changed from the one here discussed.

Feed-Grain Supplies Large

Total production of the six grain crops, soybeans and flax broke the all-time record high in 1958. The 1957 total production was exceeded by one billion, 200 million bushels. This has resulted in large current storage stocks and lower government support levels for these crops in 1959. Total Commodity Credit holdings reached $9 billion Jan. 31, 1959, as compared to around $7 billion at the low point in 1958. Currently more than 75% of these investments in inventories and loans is in the four grain crops—wheat, corn, grain sorghums and barley.

The discontinuance of the acreage reserve and corn control program and the continuation of only a limited conservation reserve program has resulted in an increase in acres in planted crops for 1959. (Table 1.) The increase in corn from 74 6 million planted acres in 1958 to an indicated planted acreage of 83 9 million in 1959 represents one of the most significant changes.

Assuming average weather and a continued yearly increase in yields of about three quarters of a bushel per acre, yields per acre for the next two years (1959 and 1960) will be about 47 and 48 bu. These yields, with the increased acreage indicated on March 1, would result in a 1959 annual production slightly larger than the 3.8-billion-bushel crop of 1958. Such production would result in more corn than would be used annually even with our expanded livestock numbers. (Table 2.) Therefore, it appears that the level of corn prices will continue to be determined by support activities.

This analysis assumes that prospective grain prices will not noticeably reduce production of total grains in the next two or three years. Farmers shift from one commodity to another rather quickly in response to changes in price relationships. However, the reduction of total crop production, as a result of lower prices, is much slower. Any significant downward adjustment in total grain production usually depends partly upon the withdrawal of land from crops.

Corn Support

The announced level of corn supports for 1959 is $1.12. If the same policies are followed in 1960, the support will probably be around $1.10. By 1961, the level would be slightly lower. The amount which the farm price of corn hangs below the loan rate is affected by several factors, chiefly: (1) The size and quality of the corn crop, (2) supplies and prices of other feeds and (3) the numbers of grain consuming livestock in relation to feed supplies. Experience before World War II and in the early 1950's when a large percentage of commercial corn was under loan, indicates about 15¢ as the probable spread between support price and farm price as an annual average.

Thus with average weather and present government programs, we can expect corn prices of around $1 bu. to slightly less for the next two or three years. Such prices would likely result in the expansion of livestock numbers to the point where normal livestock feeding ratios are established.

***EDITOR'S NOTE:** This article, reprinted from a recent Purdue University bulletin, "Economic and Marketing Information," should have high readership in the feed industry for it shows the relationship of feed supplies to livestock numbers in cyclical marketing patterns. The article starts off with this warning: " . . . If no changes are made in governmental programs and if livestock cyclical patterns follow their normal course, livestock marketings during the 1960-62 period are likely to be so large that they will create a difficult price and income situation for producers." And in it is this prediction: "Large storage holdings of feed plus large feed and livestock production during the period ahead appear likely. This, coupled with the likelihood that both the hog and cattle cycles will reach the liquidation phase during this period, and that both poultry and lamb supplies will be larger, makes it a period of serious concern to the livestock producers." What concerns the producer, likewise concerns the feed industry.*

Principal author of this article is Prof. J. Carroll Bottum, department of agricultural economics, Purdue. He was assisted by Prof. R. H. Bauman, Dr. J. O. Dunbar, Prof. Noah S. Hadley, Dr. L. S. Hardin and Prof. J. B. Kohlmeyer.

Hog Liquidation Likely

Hog numbers in the U.S. began to build up in the spring of 1958 and now appear likely to reach the liquidation phase of the cycle sometime in 1960 or early 1961. During 1958, gilts were saved back to expand breeding herds. This decreased the number of hogs going on the market at that time. When numbers build up to where marketings become large enough to make the prices unfavorable, liquidation sets in. In addition to the current production, the numbers built up in the previous years come to market. This situation may put average hog prices for the year 1960 near the $13 level. If a liquidation in numbers occurs in 1960, then hog prices will improve in 1961. Nevertheless as long as corn prices are at the $1 level, the hog cycle may be expected to fluctuate around the $14 level.

During the past 40 years, the Indiana corn-hog ratio has averaged a little less than 14 to 1. If we assume $1 corn for the next several years, this is likely to result in hogs near the $14 level for the average of the period. During the last 40 years, the ratio has never gotten more favorable than 18 to 1 for any length of time nor less favorable than 10 to 1 for any length of time. Thus, $1 corn would likely result in hogs fluctuating between $10 and $18 cwt. and averaging around the $14 level.

To approximate the effect of various levels of hog prices on the income of Indiana hog farmers under the present price structure, the extension farm account records for 105 hog farms for the three-year period 1955-57 were analyzed. These farms averaged 269 acres in size, produced 46 spring litters, 24 fall litters and obtained two-thirds of their cash receipts from the sale of hogs. Average

TABLE 1. U.S. Planted Acreages of Crops

Crop	Average 1948-57	1958	Indicated 1959
	Acres ("000" omitted)		
Corn, all	81,765	74,654	83,921
Spring wheat	18,603	12,343	13,405
Winter wheat	51,489	44,088	45,063
Oats	44,028	38,430	35,998
Barley	12,924	16,268	17,093
Flaxseed	4,969	4,014	3,678
Rice	1,906	1,444	1,603
Sorghums for all purposes	17,484	21,176	20,440
Soybeans	16,822	24,900	23,172
Hay*	74,081	73,033	70,499

*Acreage harvested.

TABLE 2. Corn Supplies, Disappearance and Prices

	1956	1957	1958	1959†	1960†
Stocks beginning of year (Oct. 1), billion bu.	1.2	1.4	1.5	1.8	2.0
Production:					
Acres, million acres	76	73	73	83	82
Yield, bu./acre	46	47	52	47	48
Production, billion bu.	3.5	3.4	3.8	3.9	3.9
Total supply, billion bu.	4.6	4.8	5.3*	5.5	5.7
Disappearance, billion bu.	3.2	3.4	3.5†	3.7	3.5
Stocks end of year (Sept. 30), billion bu.	1.4	1.5	1.8†	1.9	2.4
Under price support, billion bu.	1.3	1.4	1.6†	1.7	2.2
Per cent of production:					
Per cent of commercial acreage in compliance	24%	14%	12%	100%	100%
Price support:					
Complying farms, per bu.	1.50	1.40	1.36	1.12	1.10
Non complying farms, per bu.	1.25	1.10	1.06		
Average national farm price of corn marketing year, October-September, per bu.	1.21	1.07	1.10†	1.00	.95

*Preliminary. †Estimated.

EXECUTIVES TOUR PLANT—Executives of Sterwin Chemicals of Canada, Ltd., tour a new plant at Aurora, Ont., which will handle manufacturing for Sterwin, Sterling Drug Mfg., Ltd., and other Sterling affiliates. The plant, on 17 acres of land, is located 25 miles from Toronto. Sterwin Chemicals manufactures and distributes in Canada a complete line of feed additives, poultry health products, vitamins and flour products. Pictured (left to right) are: L. R. Patton, Sterwin, Ltd., sales manager; C. I. Kennedy, Sterwin office manager at the Aurora plant, and Robert S. Whiteside, president. Heading the list of dignitaries participating in the dedication ceremony for the new plant were Matthew Dymond, minister of health for Ontario, and C. A. Cathers, dominion member of Parliament.

total investment per farm was $90,000.

During the 1955-57 three-year period, the average Indiana farm price of hogs was $16.05 cwt. Corn was $1.22 bu. and the Indiana hog-corn ratio was 13.3 compared with the 13.6 long time average. Net cash income per farm was $7,500. Labor income was $2,900 and the rate earned on investment, 4.7%.

The income figures shown in Table 3 assume purchased feed prices 10% below 1955-57 levels, crops sold 20% less (about $1 for corn instead of $1.22), crop yields at 1955-57 levels and that the increases in farm production costs other than feed will be roughly offset by increases in farm production efficiency.

Thus, with corn at $1 bu. and hogs at $14 (approximate long time Indiana hog-corn ratio of 13.6), the net cash income of $7,500, which was the 1955-57 average for these farms, would drop to $5,300, a reduction of $2,200.

TABLE 3. Net Cash Income* for 105 Indiana Hog Farms for 1955-57 and Estimated Income With Varying Hog Prices

Size of farm, acres	246
Investment per farm, dollars	90,000
Actual net cash income, 1955-57	7,500
Net cash income with:	
$10.00 hogs, dollars	1,000
$12.00 hogs, dollars	3,150
$14.00 hogs, dollars	5,300
$16.00 hogs, dollars	7,500
$18.00 hogs, dollars	9,700

*Net cash income is the amount left over for capital and for the labor and management of the operator and his family.

Another Cattle Cycle

Cattle numbers reached their previous cyclical peak Jan. 1, 1956. They declined during 1956 and 1957, making the shortest cyclical liquidation in history. At the beginning of 1958, cattle numbers turned upward, and apparently we have entered into the expansion phase of another cycle. Cattle numbers increased 3½ million head during 1958. The price break came in the last cattle cycle 3½ years after the expansion in numbers started. If this cycle should follow a similar pattern, it would make the price break for cattle in 1961. However, adverse weather and feed conditions could cause liquidation to start earlier.

With a one-year buildup in cattle numbers, we are back to the nearly 97 million head level of 1956. This indicates that this cycle would likely carry us well over the 100 million head for the first time in history. When we are building up cattle numbers, it means we have two buyers, particularly for cows and heifers—

Linked Together—
By Private
Wire Service

THE CHAIN GANG ...Your FIRST Call

CHICAGO — D. C. A. & Co.
1202 BOARD OF TRADE BUILDING
WAbash 2-0028 TWX CG 1188

BUFFALO — T. D. F. Co.
CORN EXCHANGE BUILDING
MAdison 2323 TWX BU 484

BOSTON — Charles J. Koelsch Grain Co.
209 GRAIN & FLOUR EXCHANGE
HAncock 6-3115 TWX BS 587

CHARLOTTE — Harris-Crane, Inc.
221 SO. CHURCH STREET
EDison 2-6148 TWX CE 164

BROKERS IN FEED INGREDIENTS

KEES & COMPANY
Processors of DRIED FISH SOLUBLE PRODUCTS
A "MUST" IN EVERY SWINE OR POULTRY RATION
Call or write for complete information and price
327 S. La Salle St., Chicago 4, Ill. Phone HArrison 7-1528

★ Buy and Sell Through WANT ADS ★

WISCONSIN ALUMNI RESEARCH FOUNDATION
LABORATORY SERVICES
PRACTICAL
CHICK FEEDING STUDIES IN BATTERIES OR ON LITTER
DETERMINATIONS OF:
•VITAMIN B_{12} •ANTIBIOTICS
•ARSENICALS
A.O.A.C. vitamin D_3 chick assays
U.S.P. vitamin D rat assays — results in 8 days
U.S.P. or A.O.A.C. vitamin A assays
Other vitamin assays
Amino acid assays
Biological protein evaluations
Proximate analyses and mineral determinations
Insecticide Testing and Screening
Other biological, chemical and microbiological services
PROJECT RESEARCH AND CONSULTATION
Write for price schedule
WISCONSIN ALUMNI RESEARCH FOUNDATION
P.O. Box 2059-N • Madison1, Wis.

TABLE 4. Numbers on Farms and Value Per Head of Cattle and Hogs in the U.S., Jan. 1, 1950-59

Year	Number on farms: Cattle	Number on farms: Milk cows 2 yrs. & older	Number on farms: Hogs	Value per head: Cattle	Value per head: Milk cows 2 yrs. & older	Value per head: Hogs
	1,000 head			dollars		
1950	77,963	23,853	58,937	124.00	177.00	27.10
1951	82,083	23,568	62,269	160.00	219.00	33.30
1952	88,072	23,060	62,117	179.00	252.00	29.90
1953	94,241	23,549	51,755	128.00	203.00	26.10
1954	95,679	23,896	45,114	92.00	147.00	36.60
1955	96,592	23,462	50,474	88.20	134.00	30.60
1956	96,804	23,213	55,173	88.00	139.00	17.70
1957	94,502	22,916	51,703	91.60	147.00	24.70
1958	93,350	22,233	50,980	119.00	176.00	30.20
1959	96,851	21,606	57,201	153.00	220.00	31.90

the slaughterer and the producer. Eventually, numbers build up to where there are increases in marketings for slaughter. Prices then weaken. The increased slaughter and weakening of prices are then followed by the producers withdrawing from the market and the total annual production going for slaughter. With the weakened prices resulting from the total production going for slaughter, the next phase is generally some liquidation.

During the expansion phase, which is now taking place, cow and calf marketings for slaughter are reduced relative to steers. This makes the prices for cows and calves high relative to steers—as they now are. During 1958, slaughter of cows and calves was nearly 25% below 1957. A similar relationship appears likely to continue throughout 1959, barring a severe drouth.

When we turn from the accumulating phase of cattle numbers to the liquidation, we get rather sharp adjustments in prices. For example, U.S. prices of cattle dropped from $179 per head Jan. 1, 1952, to $92 per head Jan. 1, 1954. (Table 4.) On the other hand, prices rose from $91.60 per head Jan. 1, 1957, to $153 per head Jan. 1, 1959. Marketings and price change much more than do total cattle numbers on farms and ranches.

Consumption Factors

There are a number of factors contributing to the increased consumption per capita of beef, most important is the rising per capita income. We have known for a long time that as the per capita income rises, people tend to eat more beef. This has been particularly well demonstrated since World War II. Nevertheless, even with an expanding market, one may have depressed prices when supplies become excessive.

The trend in dairy cow numbers since 1950 has been slightly downward with a reduction of 600,000 head shown for 1958. Thus, the changes in total cattle marketings have resulted from fluctuations in beef cattle numbers almost entirely. Beef cattle marketings are likewise continuing to represent a larger share of total cattle marketings.

Large storage holding of feed plus large feed and livestock production during the period ahead appear likely. This, coupled with the likelihood that both the hog and cattle cycles will reach the liquidation phase during this period, and that both poultry and lamb supplies will be larger, makes it a period of serious concern to the livestock producers.

The ability of the livestock-feed economy to act as a safety valve for excess farm production has very definite limits which we now appear to be approaching. The experience of 1955-56 made clear that once a certain supply level is reached, the demand for cattle and hogs is not unlimited. It appears that even with high and increasing consumer incomes, the price structure to producers is endangered whenever the supply of red meats for consumption is much in excess of 160-165 lb. per capita.

It should be recognized that regardless of the situation with which we are presently confronted, livestock prices in the longer run will be high enough to bring forth increasing quantities of livestock products. The feed and livestock industry is a growing industry. Livestock products supply that phase of our diet which is expanding as per capita income rises. This, plus our expanding population, gives an increasing outlet for livestock products.

USDA PUBLISHES FARM FACT BOOK

★

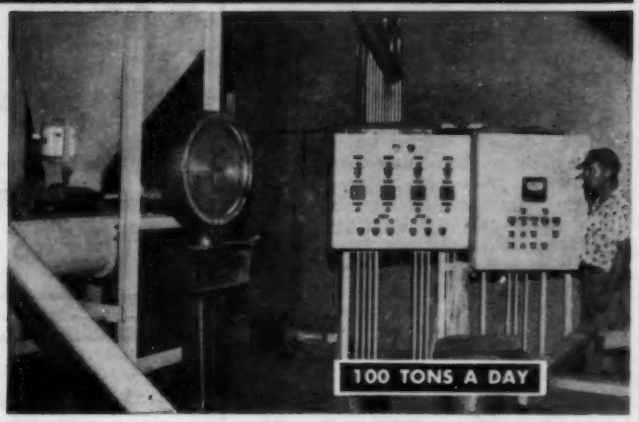
WASHINGTON—The U.S. Department of Agriculture has announced that Agricultural Statistics, 1958—USDA's annual book of farm facts—is off the press. The 600-page book is filled with tables and other information on agricultural production, supplies, costs, income and related subjects. It contains information on land use, farm ownership, farm workers, and food consumption, and there are miscellaneous statistics on weather, freight rates, refrigerated warehouse storage, world crops, foreign trade and a wide variety of other interests. Agricultural Statistics, 1958, is available at $1.75 a copy from the Superintendent of Documents, U.S. Government Printing Office, Washington 25, D.C.

New Distributors

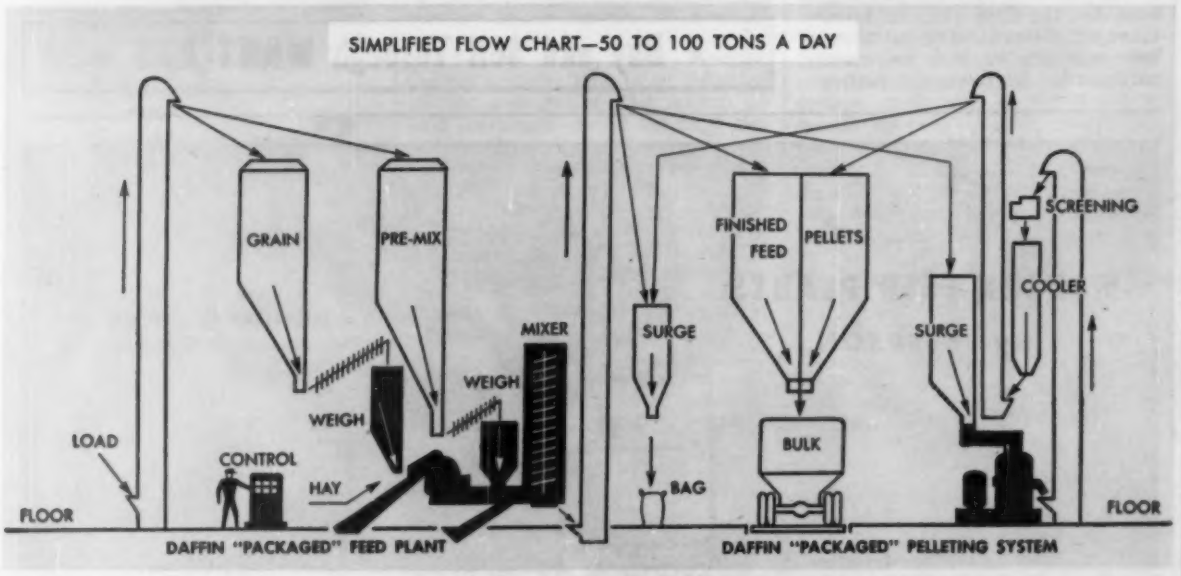
EAST ST. LOUIS, ILL.—The Dura-Buket division of National Oats Co., East St. Louis, has announced four new stocking distributors for its plastic elevator buckets.

The distributors and the territories they will serve are: Transmission Supply Co., Peoria, Ill.; Welsco Co., Ft. Worth, Texas; Stevenson Machine Co., Cincinnati, Ohio, and J. A. Webb Belting Co., Inc., Buffalo, New York.

ONE-MAN MILL!
THAT'S THE Daffin



All the way from Custom Grinding and Mixing
to 100 Tons per 8 hour a day Automated Batch Production.



YES, a Daffin is engineered for one-man operation, and that means low, low, overhead. Thanks to exclusive Modular Design, your new Daffin Packaged Plant can be ordered to suit your existing building layout. Capacity is flexible enough to meet all requirements from custom processing to "push-button" production work!

IF YOU ORDER YOUR NEW DAFFIN TODAY, within two weeks it will be turning out the best finished feed your customers ever had!

Write today for factual booklet and discover what a DAFFIN PACKAGED PLANT can do for you!

Daffin Feed Mills

Builders of the World-Famous Daffin Feedmobile, Pneumatic Conveying Systems, Pelleting Machines, Batch Mixers

SERVICE PARTS DEPOTS: Alabama-Montgomery • Georgia-Perry • Illinois-Springfield • Indiana-Indianapolis • Iowa-Cedar Rapids-Sioux City • Kentucky-Shelbyville • Michigan-Detroit • Minnesota-Rochester • Missouri-North Kansas City • Nebraska-Omaha • New York-Syracuse-Tonawanda • North Carolina-Laurinburg • Ohio-Dayton-Youngstown • Pennsylvania-Lancaster • Tennessee-Knoxville-Memphis • Texas-Dallas-Houston-San Antonio • Virginia-Lynchburg • Wisconsin-Oconomowoc • Canada-Toronto

DAFFIN MANUFACTURING COMPANY, 3286 NORTH PRINCE STREET, LANCASTER, PENNSYLVANIA

WESTERN

YEAST CULTURES

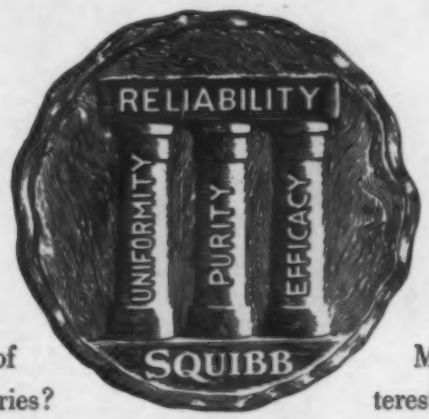
For 30 Years a Proven Source of Unidentified Growth Factors, Digestive Enzymes and B Vitamins. Better Assimilation—Better Feeds. Write

WESTERN YEAST COMPANY
Chillicothe, Illinois

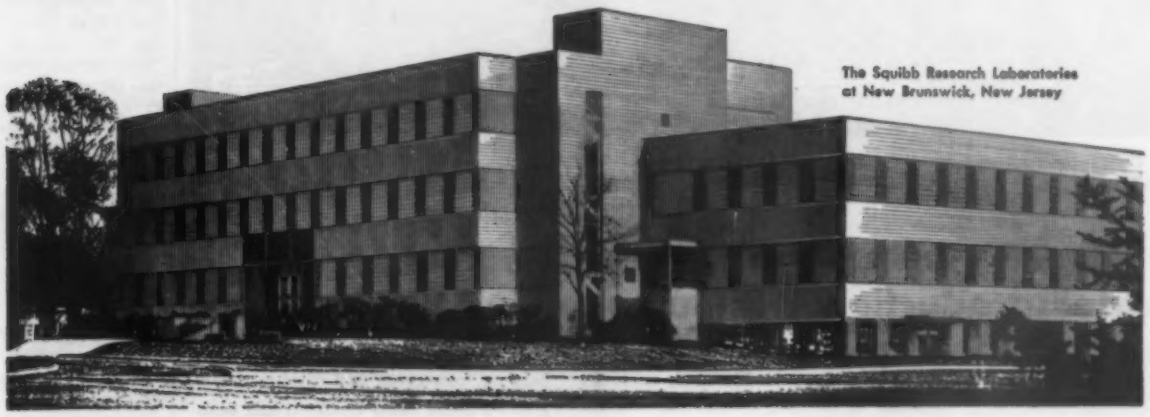
A Squibb discovery of great significance to you who use broad spectrum antibiotics in swine and turkey rations . . .

mycostatin* | 20

the first and only antifungal antibiotic for feed use



May we send you information about this new achievement of the Squibb Research Laboratories? We believe all men with a vital interest in the formulation of more effective livestock and poultry feeds will find Mycostatin-20 of unusual interest and great potential. A letter sent to the address below will bring you detailed data about Mycostatin-20 without delay.



The Squibb Research Laboratories at New Brunswick, New Jersey

CHEMICALS SALES DEPARTMENT,
745 FIFTH AVENUE, NEW YORK 22, NEW YORK

DIVISION OF OLIN MATHIESON CHEMICAL CORPORATION

—A NAME YOU CAN TRUST

©OLIN MATHIESON CHEMICAL CORP., '59 *Mycostatin® is a Squibb Trademark

Colorado Workshop Provides Poultry Management Tips

FT. COLLINS, COLO. — Various suggestions on poultry management and environment control were part of the published proceedings of a housing and equipment workshop held at Colorado State University.

The workshop covered such things as poultry house insulation, house design, ventilation and poultry equipment. The speakers were Colorado State poultry specialists.

Dr. R. E. Moreng, professor and head of the Colorado poultry department, said at the workshop, "Temperature is one of the most important environmental factors in poultry performance. If it is too high or low we experience slumps in egg production, poorer feed efficiency and poorer gains."

Dr. Moreng explained the bird has some comfort from 32° F. to 80° F. but that the optimum temperature appears to be 55° F. He said it is not clear if the temperature should be held at 55° F. with no variation. Some evidence indicates temperature change may be desirable, but a range of variation has not been established, he said.

Humidity is also a factor in performance, according to Dr. Moreng. He said extremely high or low humidities pose a stress to the bird with the result of poorer performance and even the occurrence of disease. The humidity range varies from 30% to 85% relative humidity with an optimum of 55% after the birds are about 12 weeks old. These effects have been studied only to a limited extent, however, said Dr. Moreng.

Air flow and light intensity and duration have also been important factors of environment, he said. Air flow varies from ½ to 4½ cubic feet of air per minute per bird and light intensity varies from ½ to 38 foot candles.

"When all of these factors are added up there still is a great area of question concerning environment and its effect on poultry," said Dr. Moreng. "The surface has been just scratched in studying the complex problem."

O. J. Trenary, extension agricultural engineer at Colorado, discussed insulation of poultry houses. He explained that insulation materials are rated as to their ability to transfer heat and this is reported as its insulating value.

There are commonly two ways, it is reported, according to Mr. Trenary. One is the R value or resistance and the other is the C or U value (conductance). When a material is rated with an R value the higher the figure the better is its insulation value. The C or U value is just the opposite. The smaller the figure the greater is its insulation value.

In Colorado the extension service is recommending minimum insulation values of an R value of 8 in the walls and 11 in the roof or ceiling. "These values will help to level out the high and low temperatures that are experienced throughout the year," said Mr. Trenary.

He pointed out, however, that insulation of a house is not the only step in successful housing. It must be coupled with adequate ventilation and proper house design, he said.

Mr. Trenary explained that a vapor barrier must be used on the inner wall of an insulated poultry house to prevent moisture from settling in the insulation. Such products as aluminum foil, plastic film, shiny surfaced roofing paper or 2-3 coats of aluminum paint are good. Building paper or felt is a poor moisture barrier, he said.

Design

The location of the poultry house is just as important as its design, according to T. E. Hartung, extension poultryman at Colorado State University. He said at the workshop that good air drainage, good water drainage and convenience to services such as utilities, feed delivery and daily chores must be considered when selecting a location for the house.

The key design features Mr. Hartung considered at the workshop were wide vs. narrow houses, shed vs. gable roof, and windowed vs. windowless houses.

Mr. Hartung explained that a wide house has the advantage of less wall area exposed to the elements than for the same square footage placed in a narrow house. "This reduces cost and also cuts down on the wall effect in a house," he said. "The wall effect would be a zone next to the wall which rises and falls with the wall temperature and subsequently affects the inside house temperature."

The major disadvantage of the wide house is achieving adequate ventilation, according to Mr. Hartung. But, this can be handled with proper designing, he said. The narrow house has the main advantage that it is easy to get air movement through it. However, this actually forms a major disadvantage because of the difficulty of controlling temperatures, he explained.

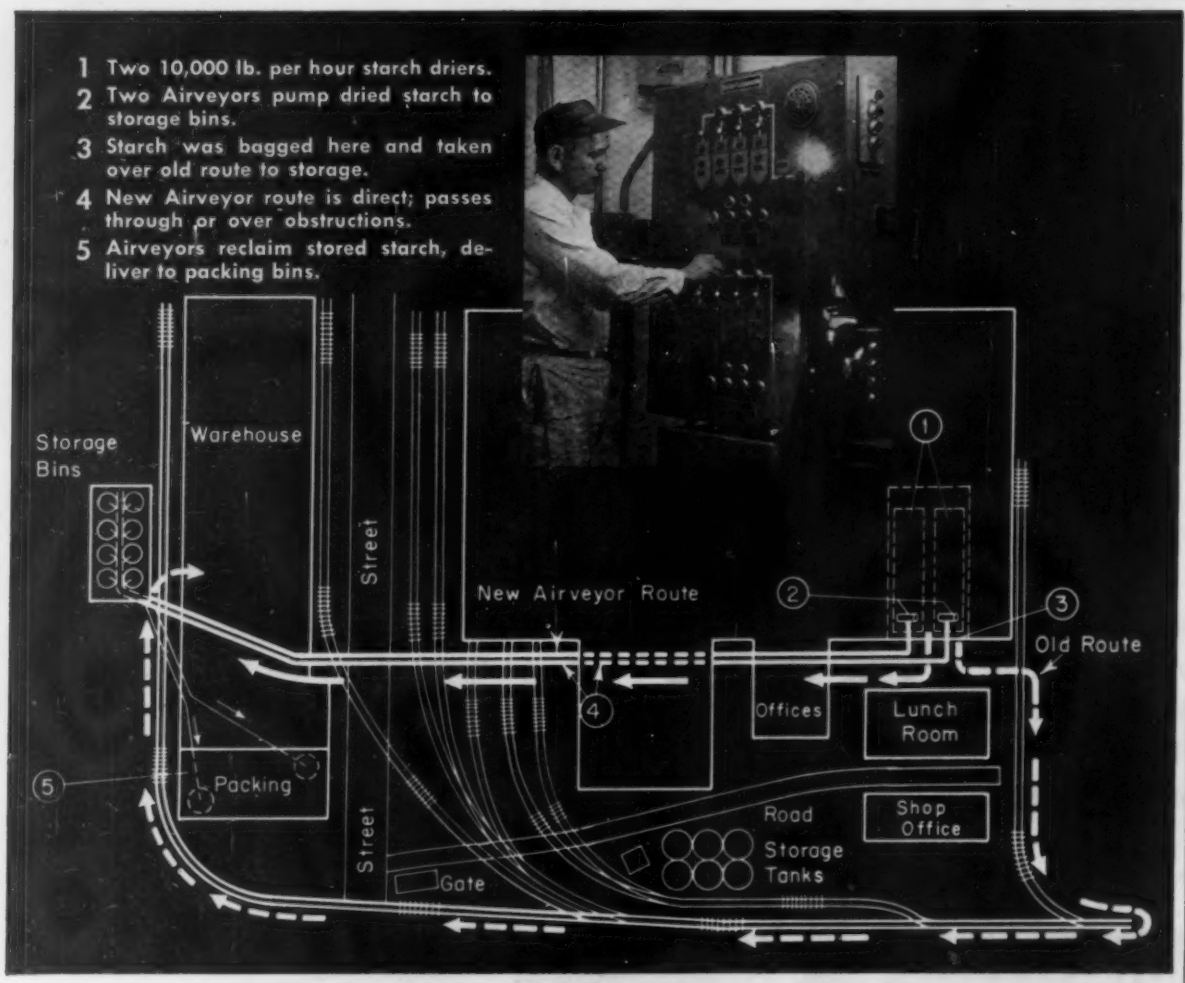
Mr. Hartung said the shed vs. gable roof mainly links itself to the width of the house. Houses up to 20-24 ft. wide are more practical for a shed roof. A gable roof is best suited in houses 30 ft. in width or more.

"The major advantage to the windowless house can be linked to lowered construction cost, reduced heat loss which could occur from windows and full control of light," he said. "The major disadvantages would be the threat of power failure and higher daily operating costs because of lights and forced ventilation."

Colorado's extension service is recommending for conventional windowed houses a window area equal to 5% of the floor area. For a solar house the windows must be doubled and the amount of window area will range from 10% to 17% of the floor area.

Ventilation

In ventilation, the general rule of thumb used to establish the capacity of the fan is to allow 3-4 cubic feet of air per minute per bird, according to Mr. Trenary. "When purchasing a fan obtain one which has a totally enclosed motor and a fan which will



PLANT MODERNIZATION THROUGH PNEUMATIC CONVEYING

FULLER pneumatic conveying system increases production without plant expansion

To increase production, the Union Starch and Refining Company's Granite City, Ill., plant first needed to expand their materials handling system. But a complete revamping of bagging and warehouse operations was impossible because there was no space available for necessary new buildings.

An Airveyor® System, engineered and built by Fuller, was the answer. Airveyor's extreme flexibility allowed it to be set up through walls, along sides of buildings, over streets, on roofs and up inclines. At Union Starch, the total distance covered is 800 feet, with a number of 45 degree and 90 degree bends in the line.

The Fuller Airveyor system transports the starch in two phases, from the driers to the storage bins and from the bins to receiving hoppers over the bagging machines. Flow is controlled automatically through control panels located in the drier room and at the bagging machines. Other controls are also provided at the panels for automatic operation of components such as feeders, blowers, conveyors and filter-receivers.

Besides being easily installed and automatically controlled, the Fuller system reduces both the amount and the expense of handling. Additional savings are made possible by Airveyor's self-cleaning facility, which greatly reduces maintenance costs.

Why not work with Fuller to design an automated pneumatic materials handling system that will help you cut costs and increase production? Write today for complete details. A-280 1355

FULLER COMPANY
178 Bridge St., Catasauqua, Pa.
SUBSIDIARY OF GENERAL AMERICAN TRANSPORTATION CORPORATION
Birmingham • Chicago • Kansas City • Los Angeles • New York • San Francisco • Seattle

Fuller
....pioneers in harnessing AIR

Feed Mixers Products
COLBY
PULVERIZED
Oats or Barley
ROLLED OATS AND FEEDING OATMEAL
COLBY MILLING, INC.
COLBY, WISCONSIN
PHONE LD-340-266 TWX Colby 8845

Donald Ganser

APPOINTED — The Fox Co., Newfield, N.J., has announced the appointment of Donald Ganser as its sales representative in western Pennsylvania and Ohio. Formerly eastern regional sales manager for National Alfalfa Dehydrating & Milling Co., Mr. Ganser will continue to sell National Alfalfa products, since Fox is sales agent for the firm, and will promote the full line of other Fox products for the feed industry.

deliver the amount of air wanted against the pressure or resistance of the system," he said. "Most exhaust systems will operate at about ⅛ inch static pressure. The pressure or blow-in systems operate for ¼ to ⅜ inch static pressure. Some fans will deliver a lot of air under no pressure or free delivery. But when put under resistance or pressure they lose their capacity rapidly."

Equipment

Mr. Hartung said single decked individual bird cages offer the maximum in records and individual bird replacement. In Colorado, however, they do not utilize the building efficiently, he said. Double decking increases the capacity and still retains the record and replacement advantage. Labor requirements become quite high, however.

Multi-bird cages (2, 3, 5 and 20 birds per cage) have been increasing in popularity in Colorado, according to Mr. Hartung. "They progressively offer more capacity and greater labor efficiency, but there is progressively less flexibility of replacements," he said.

Floor units can be divided into conventional and specialized units, he explained. The conventional house uses a central dropping pit with all of the waterers and part of the feeders over the pit. The specialized units are designed with a multi-tiered feeding and watering system over a dropping pit equipped with a cleaning device.

Another specialized unit involves slat floors, Mr. Hartung said. "The main advantage to the first type is that a great percent of the moisture is accumulated in the pit and frequently removed. In order to justify such an installation a house unit of a minimum capacity of 2,000 hens must be considered."

He said, "Slat floors offer a means of increasing the capacity of the house. They are relatively easy to install in remodeling older houses. The greatest advantage is manual cleaning under the slats." This should be set up to be cleaned automatically, he said. Sufficient head space must be allowed when building a house using slat floors.

Self feeders have a labor saving advantage in any flock size up to 1,500 to 2,000 birds, said Mr. Hartung. If the farm has buildings capable of holding 1,500 birds or more per unit then automatic feeders can be justified.

"Nests remain as one of the least improved features of our poultry house," said Mr. Hartung. "Roll away nests have been developed but many flocks refuse to use them and consequently the result is a great number of floor eggs. There is a challenge to the industry to come up with a really good nest."

FEED, FARM STORE SOLD

GILROY, CAL.—The Quality Feed & Farm Mart, Gilroy, has been sold by Hugh I. and Jessie M. Nicholas to Manuel J. and Doreen E. Barroza. The store retails animal and poultry feeds and other agricultural products.

An Alert, Healthy Dog . . . A RYDE-Fed Dog

Ryde's *FLAKED* DOG FOOD

FED DRY! NO MOISTENING!

Ryde's is so well balanced nutritionally, your customers will notice the difference in their dogs' health and vigor after feeding Ryde's for just two weeks! TRY THIS PROVEN PROFIT-MAKER. You can count on Ryde's to sell and continue to sell and to show a steady profit.

Ryde's Flaked Dog Food is sold exclusively to the Feed Trade and Pet Shops

In 5, 25 and 50-lb. Bags for Customer Convenience

RYDE & CO. 3939 So. Union Ave., Chicago 9, Ill.

DYNAFAC

makes the difference...

in your feed sales, too!

Each day, more and more feeders are demanding DYNAFAC PREMIX in their feeds. They want every bit of advantage that modern agricultural science can offer—not just *some* of it!

Regularity of dynafac performance is practically unique. The word is spreading . . . feeder to feeder; success stories are appearing continuously in the farm press and radio; in college reports from all parts of the nation — DYNAFAC PREMIX makes a good feed better!

Feeders have discovered that DYNAFAC PREMIX helps produce beef at new record lows in cost/100 lbs. of gain. They've seen living proof in their own feedlots that DYNAFAC PREMIX gives them better protection, too, against Bloat and Founder. The *new* DYNAFAC PREMIX label lists *results you can expect to get* with dynafac:

SWINE:

1. For promoting growth and feed conversion.
2. For the control of scours of bacterial origin.

CATTLE AND CALVES:

1. For promoting growth, feed conversion, bloom, and on full feed earlier.
2. As an aid in minimizing the occurrence of feed lot bloat due to high consumption of concentrate.
3. As an aid in minimizing the occurrence of feed lot founder due to high consumption of concentrate.

LAMBS:

1. For promoting growth, feed conversion and on full feed earlier.

So, improve your sales position by giving your customers what they want . . . the leading, most talked about feed additive for 1959 . . . DYNAFAC PREMIX!

ARMOUR AND COMPANY, CHICAGO, ILLINOIS

Dynafac Premix is distributed nationally for Armour by the Chemical Department, McKesson & Robbins, Inc.

COLUMBIA SOFT PHOSPHATE

IMMEDIATE DELIVERY
LOW COST
WRITE FOR INFORMATION

Columbia Phosphate Co.
1007 Washington St. Louis, Mo.

COLUMBIA PHOSPHATE CO. · PHOSPHATE PRODUCTS ·

for pigmentation use

DIAMOND®

corn gluten meal

Poultrymen and feed nutritionists agree that corn gluten meal has no equal for pigmentation. Include Diamond Corn Gluten Meal in your broiler rations for added vitamin A potency and yellow pigment.

CORN PRODUCTS SALES COMPANY
17 BATTERY PLACE, NEW YORK 4, N.Y.

CANADIAN FISHING TRIP—The feed dealers and salesmen who won a fishing tip to Minaki, Ont., in the Tone Feed "Spring Growth Bonus" program are shown here with representatives of Peavey Feed Mills, Minneapolis feed manufacturer and sponsor of the program. The dealers won the four-day all-expense trip in competition with 800 feed dealers from seven Upper Midwest states for growth in merchandising and farm service work.

Pictured (left to right) are: Back row—Ed Spindler, Spindler Mill, Stratford, Wis.; Ray Mulso, Mulso Feed Service, Sherburn, Minn.; Pernell Reitan, finance director; W. G. Mans, territory manager; J. R. Adams, advertising manager; Fred Weiger, Peavey Elevators, Henderson, Minn.; Duane Osland, Osland Produce, St. James, Minn.; Kenneth Schmitt, territory manager, and J. R. Lindell, sales manager; front row: Oz Lillemoe, Lillemoe Feed & Supply, Montevideo, Minn.; Robert Nelson, purchasing agent; Erwin Jene, Benson (Minn.) Hatchery; Lee Schwalm, Williams & Schwalm, Chamberlain, S.D.; Marcel Gogolin, Peavey Elevators, Seneca, S.D.; John Johansson, Champlin (Minn.) Feed Mill; G. C. Renner, Peavey Elevators' superintendent, and Wally Richards, Teske Coal & Feed, Chaska, Minn.

Farm Bureau Hog Station About Ready

TIPTON, IOWA — Construction of the building which will house the first Farm Bureau hog marketing concentration point in Iowa is nearing completion here.

Merrill Evans, manager, Farm Bureau Livestock Marketing Corp., was recently quoted as saying the pole-type structure "will be the most modern marketing station in the nation."

The concentration point will be able to handle 800-1,000 hogs daily. Facilities will include office space, scales, alleys, various sizes of pens and loading docks. All materials used are being furnished through the Iowa Farm Supply Co. and the station is being constructed by the Western Silo Co., Des Moines.

When the station is opened, the Illinois Livestock Marketing Assn. will act as selling agent for the livestock brought to Tipton in eastern Iowa by area farmers who have signed three-year marketing agreements.

Joe Brown, Freeport, Ill., associated with the Illinois Livestock Marketing Assn. for about 15 years, has been hired as manager of the concentration point.

Big LENNOX Batch Bin Dries Grain Uniformly ...Prevents Over-Drying

KEEP GRAIN MOVING...THROUGH THE "SUPER 600"

- **Automatic recirculation breaks up wet pockets, blends grain**
- **Loads, unloads up to 1500 bushels per hour**
- **LP gas or oil-fired, complete safety controls**

Let the "Super 600" keep you ahead of harvest demand . . . drying more profit into every bushel. Automatic recirculation gently moves the grain. Huge air delivery evenly distributes heat through *all* the grain. Drying is uniform—no baking; and faster—without 'drying-over' delays. As operating expense remains low, batch profit continues high. You load the 9 ft. drag auger from any width tail gate. And choose heat output from 500,000 to 4,500,000 Btuh. Your "Super 600" does the rest. Its sixteen gauge steel walls, both inside and out, are of super strong skin stressed construction. All units factory wired and fire tested. Available with PTO or electric drive 3-phase current, optional automatic shut-off for heat and fan.

This year, keep ahead with the "Super 600" . . . a more practical and profitable grain dryer for elevator and custom work.

WRITE TODAY FOR DETAILED ILLUSTRATED LITERATURE

LENNOX Industries Inc.
FARM EQUIPMENT DIVISION
Dept. FS-7 Box 1294, Des Moines 5, Iowa

AUTOMATIC RECIRCULATION STEP-BY-STEP

Easy-to-load 9 ft. DRAG AUGER ❶ takes grain to BOOT ❷. BUCKET ELEVATOR ❸ lifts to LEVELING AUGER ❹. Open LEVELER TROUGH DOORS ❺ admit grain to DRYING BINS ❻. Built-in air cleaner removes trash lighter than grain. Powered METERING ROLLS ❽ provide positive metering of grain to UNLOAD AUGER ❾ for either recirculation or unloading.

Dawe's specialists

This is the VITAMELK program:

1. VITAMELK—a comprehensive vitamin, trace mineral, antibiotic and unidentified factors fortifier. Full fortification in one package.
2. COMPLETE FORMULATIONS for farm-tested feeds.
3. TAG INFORMATION for today's complicated feed tag requirements.
4. COMPLETE FEEDER INSTRUCTIONS on how to use Vitamelk fortified feeds to best take advantage of their great built-in power.
5. DAWE'S QUALITY CONTROL laboratories are a remarkable help in solving special problems.
6. MERCHANDISING and sales counsel.
7. CONTINUING RESPONSIBILITY for applying the latest nutritional knowledge to your feeds.

on your staff...but not on your payroll

THE VITAMELK PROGRAM

When you program your feed business the Vitamelk way, you establish a nutritional laboratory affiliation. You are backed by the vast resources and qualified personnel of Dawe's. You have a direct line to nutritionists, chemists, laboratory technicians, production people, field men, merchandisers . . . specialists all . . . men who know the intricacies of today's complex feed industry. Their goal is helping you program a more successful feed business. In effect, they are on your staff, but on our payroll.

Today's modern Vitamelk and the Vitamelk programs are based on over 30 years' specialization in vitamin nutrition and feed fortification. When you fortify with Vitamelk, Dawe's nutrition, merchandising, manufacturing and quality control know-how is yours, yet you pay for Vitamelk only. Write today for details of specific Vitamelk programs for poultry, swine, beef and dairy cattle.

Dawe's

DAWE'S LABORATORIES, INC.

4800 South Richmond Street
Chicago 32, Illinois

World's Oldest and Largest Specialists in Feed Fortification

FOREIGN OFFICES:
Belgium—13 Courte rue des Claires, Antwerp • Italy—Corso Magenta 81, Milan
Venezuela—Apartado 3050, Caracas • Mexico—Apartado 25770, Mexico 12, D. F.

SNOW WHITE

OYSTER SHELL

- Steady Profits
- Highest Quality
- Best Service

White Shell

CORPORATION

Jacksonville, Florida

Distributed by

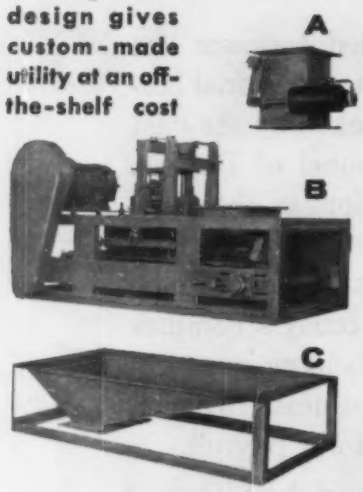
EDWARD R. BACON GRAIN CO.

177 Milk St. Boston 9, Mass.

UNITIZED

WEIGHER-FEEDER

Building-block design gives custom-made utility at an off-the-shelf cost



UNITIZED construction makes the W-C Weigher-Feeder readily adaptable to practically any processing setup. Components are standardized, proven and interchangeable . . . pre-engineered with virtual "plug-in" simplicity.

A The UPPER FRAME controls material input, is supplied with a rotary feeder, sliding gate, vibratory feeder or other mechanism matched to material and flow requirements.

B The CONVEYOR FRAME, where material is weighed, includes a complete conveyor section, weighing pan and transmitter with integral tare adjustment. W-C's system of flexure mountings assures accurate measurement despite uneven loading or pile-ups. There are no knife-edges, beam pivots or other points of concentrated wear to affect accuracy.

C The LOWER FRAME is optional; can be a simple chute as shown.

In addition, the W-C Weigher-Feeder is designed to handle such instrument-controlled functions as flow totalizing, recording, programming, and material proportioning. Units are also available for installation on existing conveyors.

Complete information is given in Catalog 12. Write for a copy

W-C

S.A. 1687

WEIGHING and Control COMPONENTS, Inc.

206-O Lincoln Ave., Hatboro, Pa.

Effect of Pelleted Ear Corn In Lamb Fattening Rations

By H. E. Hanke and Dr. R. M. Jordan*

University of Minnesota

The feeding of pelleted hay and grain rations, or grain rations, to lambs is being practiced by many livestock feeders. Pelleting the complete ration reduces labor in feeding and assures the consumption of roughage and concentrate, and other additives in the proportion desired. In addition, pelleted rations are reported to increase rate of gain and feed efficiency.

Neale (1953, 1955) obtained a material increase in rates of gain and in feed efficiency of fattening lambs by pelleting rations consisting of 50 or 60% low quality roughage, and 40 or 50% sorghum grain.

Esplin et al. (1957) summarized feeding trials conducted at nine experiment stations which involved the feeding of pelleted rations to fattening lambs. They concluded from this summary that improved feedlot performance when pelleted feeds were fed was due primarily to an increase in feed consumption. However, there was considerable variation in feed consumption figures between stations, and not in all cases did they favor the pelleted ration.

Cate et al. (1955) concluded that pelleting the complete ration increased feed consumption of low quality feeds far more than when high quality rations were pelleted. Bell et al. (1955) reported slightly greater efficiency in digestion of crude protein and ether extract, but lower apparent digestion of crude fiber by lambs fed pelleted hay and grain rations.

Esplin et al. (1957) found no significant difference in apparent digestion coefficients of dry matter, ether extract, fiber or nitrogen-free-extract of pelleted rations when fed to lambs.

The cost of having a complete lamb ration ground and pelleted varies from $5-12 a ton. This high cost of pelleting the complete lamb ration has, in most cases, more than offset the advantage due to increased gains or feed efficiency. Bell (1949) in an extensive feeding test in which corn cobs constituted various parts of lamb fattening rations, concluded that the cob was of low feeding value when included in lamb rations.

In view of the evidence in favor of pelleting the complete ration for lambs, but recognizing the high cost of pelleting the entire ration, an experiment was conducted to determine whether pelleting ground ear corn would enhance the feeding value of the cob portion of the ration sufficiently to compensate for the added expense.

Two separate trials were conducted during the fall of 1956 and the winter of 1957. In both trials good quality Western lambs were used as test animals. The lambs were allotted to treatment from outcome groups on the basis of their weight. They were individually weighed at the beginning and end of each trial, and group-weighed bi-monthly. The lambs were hand fed, in groups, a fattening ration of grain, high quality alfalfa hay and soybean oil meal. Fresh water, salt and minerals were fed free-choice.

The ration treatments fed in both trials I and II were: Lot 1, shelled corn; Lot 2 and 4, ground ear corn, and Lot 3 and 5, pelleted ground ear corn. In trial I the lambs in lots 4 and 5 were not sheared. In trial II, the lambs in lots 4 and 5 were not sheared until 28 days prior to slaughter.

The individual carcass grades and carcass yield by groups were obtained on all lambs slaughtered. Analysis of variance (Snedecor, 1956) was the method used for the statistical analysis of the data.

Results

The results of both trials are presented in Table 1.

Growth Data—In neither trial I nor trial II did shearing have any statistically significant effect on the rates of gain. Therefore, the data were pooled and will be discussed on the basis of the average of Lots 2 and 4, and 3 and 5 in each of the two trials.

In the first trial, lambs fed either ground ear corn or pelleted ground ear corn gained slower than lambs fed shelled corn. While these differences appear to be real, they were

*Paper No. 1017 Miscellaneous Journal Series of the Minnesota Agricultural Experiment Station, St. Paul, Minn.

TABLE 1. Effect of Pelleted Ear Corn in Lamb Fattening Rations

Trial	I					II				
Lots	1	2	3	4	5	1	2	3	4	5
Treatment†	Control	G	P	G	P	Control	G	P	G	P
Number days			91					84		
Number lambs	10	10	10	10	10	12	12	12	12	12
Average initial weight, lb.	77.9	74.9	75.0	80.3	81.6	68.6	68.6	68.3	72.7	72.2
Average gain per lamb, lb.	27.4	23.9	25.6	23.4	23.1	45.1	39.4	35.7	41.4	34.1
Average daily gain, lb.	.30	.26	.28	.26	.25	.54**	.47*	.42	.49*	.41
Gain index	100.0	86.7	93.3	86.7	83.3	100.0	87.0	77.8	90.7	75.9
Average daily feed consumption:										
Grain, lb.	1.42	1.38	1.40	1.39	1.41	1.65	1.83	1.59	1.80	1.44
Hay, lb.	1.20	1.27	1.22	1.24	1.24	1.68	1.67	1.62	1.62	1.59
Protein supplement, lb.	.10	.10	.10	.10	.10	.10	.10	.10	.10	.10
Feed per 100 lb. gain:										
Grain, lb.	470	527	498	542	554	307	390	374	365	355
Hay, lb.	398	483	429	484	486	313	356	381	329	392
Protein supplement, lb.	33	38	36	38	39	19	21	24	20	25
Feed efficiency index	100.0	85.0	93.6	84.7	83.5	100.0	83.3	82.0	89.5	82.8
Carcass grade	8.2	8.2	8.5	7.2	7.9	6.5	5.4	5.7	6.1	5.4
Carcass yield, %	53.6	53.8	53.0	50.9	52.1	54.06	53.02	53.04	52.49	51.69

†In both trials: Lot 1 was fed shelled corn, alfalfa hay and soybean oil meal; Lots 2 and 4 were fed ground ear corn, alfalfa hay and soybean oil meal; Lots 3 and 5 were fed pelleted ground ear corn, alfalfa hay and soybean oil meal. In Trial I, the lambs in Lots 4 and 5 were not sheared. In Trial II, the lambs in Lots 4 and 5 were sheared 28 days prior to slaughter.

*Significantly faster daily gain than lambs fed pelleted ground ear corn.

**Highly significant faster daily gain than lambs fed pelleted ground ear corn.

STILL ON THE ADVANCE...

THE B&L COMPLETE MOBILE FORMULA FEED BLENDER

Offering Unmatched Maneuverability and Ease of Operation!

B&L

Here's the modern mobile feed plant that grinds, mixes, and blends — produces any formula feed right at the barn door. It carries a full day's supply of molasses and supplement, and features micro-ingredient supplement and medicant mixing . . . high speed molasses blending. Top quality feeds from farm grains and roughages.

STANDARD EQUIPMENT ON THE B&L FORMULA FEED BLENDER — The first practical mobile baled hay grinder grinds round and square bales with equal ease.

- GRINDS WHOLE BALES WITH NO EFFORT
- LARGE FEED TABLE — 30" ABOVE GROUND
- POWER DRIVEN GATHERING FINGERS
- VARI-SPEED FEED DRIVE
- COMPLETELY ENCLOSED WHEN NOT IN USE
- NO EXTRA POWER NEEDED
- UTILIZES FULLEST EQUIPMENT EFFICIENCY

BACKED BY MORE THAN 100 YEARS EXPERIENCE IN FEED AND GRAIN PROCESSING MACHINERY

BARNARD & LEAS Manufacturing Company, INC.

1219 Twelfth Street S.W. EMpire 5-1481 Cedar Rapids, Iowa

Selling Eggs Is My Business, Too!

A 3-egg man at breakfast time, Hess & Clark's No. 1 salesman has a new project for the year ahead. Here's what Red Foley says about it:

Every Saturday I get my gang together down in Springfield, Mo., and we climb aboard the NBC Monitor network . . . 140 stations in all.

Maybe you've heard the show. We have a lot of music . . . country tunes, inspirational hymns, and even a "Hit Parade" song now and then. Our guest stars are as fine a lot as you'll come across . . . fine folks like Uncle Cyp, Marvin Rainwater, Snooky Lanson, Fran Allison, Johnny Horton, and others.

We think we have to do a lot of *good* entertaining to get listeners. And even though I'm sometimes called "America's Favorite Country Music Man," we somehow manage to attract as many city folks as we do farm families.

So our first job is to get listeners by entertaining them. Then my pal, Joe Slattery, can do a good job of telling them about what our sponsor has to sell. Last year that was Hess & Clark, the company that specializes in *new products and ideas for healthier livestock and poultry.* And judging from the cards and letters . . . and sales . . . a good many people who hadn't been using Hess & Clark products suddenly got interested in nf-180 for improved egg production.

You'd be amazed at all the mail we got. And an awful lot of it started out:

"Send me the name of a feed dealer who can supply nf-180. I think this is what my chickens need."

So on the basis of all the new people we got interested in the Hess & Clark products you sell, we're going to be working for the same company again this year.

But we're going to do something else, too. Like I said earlier, almost as many city folks listen to our music as farmers. They don't buy things from Hess & Clark or from feed people . . . but they sure eat a lot of the things farmers produce. So we're going to steal a little bit of that high-priced NBC time and tell the folks in town about the value of enjoying more eggs at meal and snack time every day.

Now we know we aren't going to move mountains. But someone has to make a start. And we *will* be talking with folks in 48 of the 50 states . . . 140 radio stations . . . and usually right about the time they're thinking about lunch or supper.

Let's "sell" our way out

We're pleased as the dickens to be helping Hess & Clark sell their fine nf-180—and *bifuran* too—for healthier livestock and poultry. And we're downright delighted to take a part in helping farmers sell their way out of the surpluses that are hurting egg prices these days. We hope you'll listen in . . . and remind your customers to sit down and tap their feet with us for 15 minutes every week, too.

By the way, right down below here in big type is something you're going to see and hear a lot more of in the months ahead. I wanted you to be the first to know about it:

Enjoy the *Golden Goodness of Eggs*

nf-180®
brand of
furazolidone

Meet Red Foley and learn more about the Golden Goodness of Eggs campaign at the APHF meeting in St. Louis, July 21-22-23. We'll be there, too. Hess & Clark, Division of Vick Chemical Co., Ashland, Ohio.

NT-9-3

SALVANA K

DBGM Nr. 123456

Skim milk + „Salvana K" = success

A pressed cake, easily divisible, with all vitamins and active substances.
An example: 5 kg will suffice for breeding a calf!
A best-seller from Germany.
Who will take over the marketing?

TRANATOGEN-WERK
Elmshorn/Holst. Muhlenstrasse 9 Germany

not of sufficient magnitude to be significant statistically.

In the second trial, the lambs fed shelled corn gained significantly faster ($P<.01$) than the lambs receiving pelleted ground ear corn. The lambs fed ground ear corn gained significantly faster ($P<.05$) than the lambs fed pelleted ear corn. While the lambs that received ground ear corn gained slower than the control lambs, this difference was not significant.

Feed Consumption—In the first trial, the average daily grain consumption during the entire trial was similar in all lots. However, during the last 28-day period it was difficult to keep the lambs receiving pelleted ear corn on full feed. This is in agreement with Perry et al. (1958) who reported that cattle fed a pelleted high energy ration consumed 24% less feed and gained 11% slower than cattle fed the same ration in meal form. They concluded that pelleting high energy rations does not have the same effect on cattle as pelleting a high roughage ration.

In the second trial, the lambs receiving ground ear corn consumed considerably more grain than the lambs fed either shelled corn or pelleted corn. The greatest difference in feed consumption was between lambs fed ground ear corn and those fed pelleted ear corn. This difference was most apparent during the last month of the trial. During that period it was very difficult to keep the lambs receiving the pelleted ear corn on feed.

The lower feed consumption of lambs fed pelleted ground ear corn was entirely unexpected and very difficult to explain. Apparently, pelleting only the grain ration does not increase the palatability to the degree that it does when the entire ration (roughage and concentrate) is pelleted. The reluctance to eat the pelleted ground ear corn appears to be the principal reason for the relatively poor gains made by this lot.

Feed Efficiency and Carcass Grade—In both trials the lambs receiving shelled corn had the highest feed efficiency. There was little real difference in the feed required to produce 100 lb. of gain in the lambs fed ground or pelleted ear corn. Under the conditions of this trial, pelleting ground ear corn did not enhance its palatability or increase the nutritive value of the cob as measured by lamb gain. This confirms the report of Bell (1949) in which he reported that the addition of corn cobs to lamb rations was a detriment rather than an asset. Merely pelleting the cob did not rectify the situation.

There was little consistent difference between the carcass grades of the lambs in the various lots. However, in the first trial the lambs that were sold in full fleece graded somewhat lower. In the second trial the lambs receiving shelled corn graded somewhat higher than the lambs receiving either pelleted or ground ear corn.

Summary

Two trials with fattening lambs were conducted to compare the relative value of shelled corn, ground ear corn or pelleted ground ear corn. All the lambs received high quality alfalfa hay, soybean oil meal and minerals.

In trial I, there was no significant difference in rate of gain between the lambs fed the three "forms" of corn. However, the control lambs made the largest gains.

In trial II, lambs fed pelleted corn gained significantly slower ($P<0.01$) than the control lambs, and significantly slower ($P<0.05$) than the lambs fed ground ear corn.

In each trial the lambs fed shelled corn required about 15% less feed per 100 lb. of gain than lambs fed either ground or pelleted corn. During the last four weeks of each feeding period, lambs receiving pelleted ear corn were difficult to keep on feed. During that period they consumed less feed than either the lambs fed shelled corn or ground ear corn.

Carcass grade between the various lots within each trial were variable and non-significant.

LITERATURE CITED

Bell, D. S., 1949—Corn cobs for lambs; Ohio Agr. Expt. Sta. Res. Bul. 690.

Bell, T. D., Richardson, D., Cox, R. F., Needham, J. M., and John, R., 1955—The relationship of physical balances in the utilization of pelleted and unpelleted rations for lambs; Kansas Expt. Sta. Circ., 320:15.

Cate, H. A., Lewis, J. M., Webb, R. J., Mansfield, M. E., and Garrigus, U. S., 1955—The effect of pelleting rations of varied quality on feed utilization by lambs; J. Animal Sci., 14:137.

Esplin, A. L., Garrigus, U. S., Hatfield, E. E., and Forbes, R. M., 1957—Some effects of pelleting a ground mixed ration on feed utilization by fattening lambs; J. Animal Sci., 16:863.

Neale, P. E., 1953—Alfalfa cubes for fattening lambs and wethers; N. Mex. Agr. Expt. Sta. Bul. 376.

Neale, P. E., 1955—Alfalfa cube mixtures for fattening lambs; N. Mex. Agr. Expt. Sta. Bul. 395.

Perry, T. W., Whitfield, W. D., and Beeson, W. M., 1958—Pelleted feed vs. meal with and without hygromycin for self-feeding Angus calves; Purdue Agr. Expt. Sta. Mimeo A.H. 228.

Snedecor, George W., 1948 — Statistical Methods (4th ed.); Iowa State College Press, Ames, Iowa.

SHANZER OWNER REPORT:

"Trouble-free operation, with top quality drying results—that's our experience with SHANZER equipment"

Says, Homer Malmquist, Mgr.
Farmers Co-op
Lake Wilson, Minnesota

Mr. Malmquist continues:

"...our early drying operations were built around a Shanzer Model 9 Crop Drier. This first experience with Shanzer equipment was so satisfactory, that when growing volume called for more capacity, we naturally moved-up by choosing one of Shanzer's bigger units.

"Like before, we get top quality results and economy right down the line. Shanzer service and follow-up has been excellent as well..."

WHY YOU GET MORE FOR YOUR DRIER DOLLAR WITH A SHANZER

Screen column design, found only in Shanzer driers, puts all the grain near warm air source for amazing drying uniformity and high capacity. No ledges to block grain flow.

Complete planning assistance is available from our fully staffed engineering department on drier layout, flow problems and special handling equipment.

Specialized manufacturing methods and equipment, backed by over 25 years of drier experience, assure the highest quality obtainable in grain drying machinery.

Custom fitted installation gives you maximum processing efficiency. All parts are die-punched for true erection and easy interchange. Every detail is permanently recorded.

SHANZER MANUFACTURING COMPANY

Designers and Manufacturers of Stationary and Portable Grain Driers, Bucket Elevators, Conveyors and Manlift Elevators

Home Office: 85 Bluxome Street • San Francisco 7, California • Phone SUtter 1-5200

SHANZER

Sales Offices: 20 ON THE MALL, Prairie Village, Kansas City 15, Missouri, ENdicott 2-6448 · 1614 Plateau Drive, Route 113, Jackson, Michigan, STate 2-7556 · Box 144, Route 4, Excelsior, Minnesota, GReenwood 4-9547

Send for *Free Folder* giving full details

C. D. Russell with Merck at Portland

RAHWAY, N.J.—Clayton D. Russell has been assigned as an agricultural and animal health sales representative for Merck & Co., Inc., chemical division, Rahway. He will be based in Portland, Ore., and serve the four-state area of Oregon, Washington, Idaho and Montana.

C. D. Russell

Mr. Russell moves to his new assignment from Columbus, Ohio, where he has served since 1951 as Merck representative in agricultural products for Ohio and Michigan. He earned his bachelor's degree in chemistry at Morris Harvey College, Charleston, W.Va. He joined Merck in 1948 in field sales work, serving West Virginia, Virginia and Kentucky.

Mr. Russell is a member of the Columbus Feed Club, Cincinnati Feed Club and the Cincinnati branch of the American Association of Cereal Chemists.

Annual Georgia Poultry Institute Planned Aug. 24-27

ATHENS, GEORGIA — The fourth annual Georgia Poultry Institute will be held at the Rock Eagle 4-H Club Center near Eatonton on August 24-27. The institute will feature topics of interest to commercial market egg producers and broiler operators, according to a release by the Georgia College of Agriculture, Athens.

The program Aug. 25 will include discussions of contract egg farming, problems in vaccinating for laryngotracheitis, quality of Georgia eggs and whether they can compete with other areas and economic traits of importance in selecting egg type birds. Who is going to control farming, business management in egg farming and a panel discussion on maintaining egg quality will also be held. Time will be set aside on Aug. 25 and 26 for the people attending the Poultry Institute to discuss their problems with the speakers.

Using a sedative in catching, handling and processing poultry will open the program Aug. 26. The use of barbiturates is still in the experimental stage and they seem to hold considerable promise in handling broilers, says the Georgia release. Topics on communication to be discussed will feature the necessity of trading ideas, what we need to do to survive and "What's Between the Ears." The annual meeting of the Georgia Poultry Federation will also be held Aug. 26.

Aug. 27 is Broiler Day. K. K. Hale, executive vice president, Peterson Breeding Farm, Decatur, Ark., will discuss the managing and feeding of broiler breeder males. Mr. Hale will discuss several new ideas on feeding being tried. Chester Pilch, Pilch's Poultry Breeding Farm, Hazardville, Conn., will discuss restricting the feed of broiler breeder females during their laying as well as their growing period. Broiler management tips, importance of developing new poultry products, disease problems and the broiler auction will also be discussed.

The poultry meeting was planned for all members of the family. The meeting will include demonstrations for the ladies on the use of the newer kitchen equipment and appliances, as well as the preparation of tasty poultry and egg dishes. The demonstrations will be given by home economists from equipment and appliance and utility companies.

A recreation program during the meeting will include swimming, boating, fishing, crafts, ball games, movies, party games and hikes.

Successful Farming Plans State Editions

DES MOINES — Successful Farming magazine will publish 20 state and regional editions, plus the regular edition, beginning with the January, 1960, issue, Fred Bohen, president of Meredith Publishing Co., Des Moines, announced.

Four individual state editions—Iowa, Minnesota, Nebraska and Wisconsin—will be offered to advertisers, with 16 other editions covering different combinations of states throughout the magazine's major circulation area. Circulation deliveries range from 67,000 to 600,000, to 1,300,000 for the regular edition.

Mr. Bohen said the plan—made possible by the greatly expanded production facilities of a new $10 million, 500,000 sq. ft. printing plant—"will, for the first time, give advertisers magazine quality and selectivity for state and limited-area advertising."

There will be no change in the editorial direction or format of the magazine, Mr. Bohen stated. State and regional advertising will be carried as an addition to the regular magazine.

Virginia Tests Show Hog Can Use Its Lard

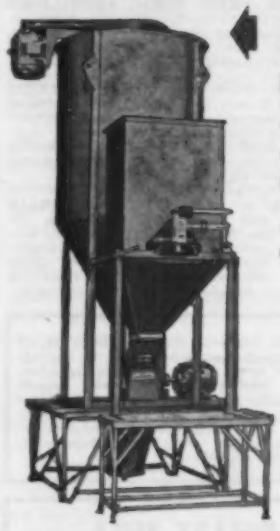
HOLLAND, VA. — Lard—produced by the hog—can also be used by the hog, according to tests at the Tidewater research station. Scientists explain that high energy rations for swine are increasing. One possible way to increase energy concentration in feeds is to use inedible animal fats.

In the Holland tests, it was found that a 6% to 8% lard can be used efficiently as a way to improve energy of standard swine rations, or as a way to build up the energy in high fiber rations. Specifically, the data showed that snapped corn can be used by the growing pig if the energy is built up by using lard.

A complete report on the two-year study is available in Virginia Agricultural Experiment Station Bulletin 506, "Inedible Lard in Swine Rations."

NELLIS
FEED COMPANY
Brokers
of Feed Ingredients
4010 Board of Trade Bldg.
WAbash 2-7322 Chicago 4, Ill.
TWX 623

JAY BEE PERFORMANCE — PROVED FEED PROCESSING MACHINERY



JAY BEE "Pig and Poultry" Feed Unit

Make your own formula feed the way you want it—when you want it—as much as you want. 7½ H.P. hammermill, weight hopper and scales, vertical mixer in 3 sizes—1 ton, with 5 H.P. motor; 1½ ton, with 7½ H.P. motor; 2 ton, with 10 H.P. motor. One-man operation—requires only 6'x10' space—capacity up to 22 tons per day.

JAY BEE "Puritan" VERTICAL FEED MIXER

For consistently high-quality, high-volume production. From ½ to 3-ton capacity, 3 to 15 H.P.; overall diameter 48" to 72", above-floor height 108" to 168".

JAY BEE "Puritan" HORIZONTAL FEED MIXER

A heavy-duty unit built for years of dependable service. From ½ to 2-ton capacity, 10 to 40 H.P. Molasses mixing equipment and floor level concentrate conveyor optional on all models.

JAY BEE Drag Feeder

A sturdy, efficient feeder, size 14'x20", with 1½ H.P. 220/440 volt, 1800 RPM motor. Automatic trip relay switch for continuous operation.

JAY BEE "Puritan" No. 4 Molasses Mixer

Puts molasses into the feed instead of feed into the molasses—mixes perfectly under all conditions. Capacity 6,000 to 12,500 lbs. per hour—10 H.P. mixer, 3 H.P. pump, 1½ H.P. feeder screw.

JAY BEE HYDRAULIC TRUCK HOIST

Makes bulk unloading simple, safe, efficient, economical—handles pick-ups and long wheelbase trucks—dual cylinders for extra power—maximum lift to 45 degrees. When not in operation, platform is flush with ground level, becomes usable working space.

For complete information about the entire Jay Bee line, see your Sedberry distributor or write

J.B. SEDBERRY, Inc.
TYLER, TEXAS • FRANKLIN, TENN.

☆ Classified Ads ☆

Classified advertisements received by Tuesday each week will be inserted for the issue of the following Saturday. Rates: 15¢ per word; minimum charge $2.25. Situations wanted, 10¢ a word; $1.50 minimum. In figuring cost of your classified ad . . . each word, abbreviation, telephone exchange and number, set of initials, or group of figures counts as a word. To the number of words in your want ad itself add six (6) words for your name and address or name and address of your firm. This applies for both direct-reply ads and for blind ads containing a box number. If an ad is keyed, care of Feedstuffs, 20¢ per insertion additional charged for forwarding replies. Commercial advertising not accepted in classified advertising department. Display advertising accepted for insertion at minimum rate of $12.00 per column inch. No discount on ads ordered for more than one insertion. All Want Ads cash with order.

SITUATIONS WANTED

FEED TECHNOLOGY GRADUATE, MAjor in nutrition, young, married, experienced in industry, seeks responsible position in feed industry. Address Ad No. 4980, Feedstuffs, Minneapolis 40, Minn.

FARM BACKGROUND, BS IN AGRICULture, DVM — 1955, extensive nutritional and diagnostic experience in poultry and livestock. Particularly interested in swine production. Want field position in promotion development servicing, and applied research. Prefer East, living locality and program development opportunities primary considerations. Please give all details in first letter. Address Ad No. 4991, Feedstuffs, Minneapolis 40, Minn.

MACHINERY FOR SALE

FEED MIXER, 1-TON CAPACITY, GUARanteed first-class throughout, 5 H.P. motor drive. Address Ad No. 3479, Feedstuffs, Minneapolis 40, Minn.

CHAMPION MOBILE GRINDER AND mixer units. Champion Portable Mill Co., 2105 Como Ave. S.E., Minneapolis 14, Minn.

USED SECO MOBILE FEED MILL—EXcellent condition. Seco, Inc., Goodlettsville, Tenn.

FOR SALE — USED DAFFIN MOBILE Mill. Completely reconditioned, moderately priced. Seco, Inc., Goodlettsville, Tenn.

PORTABLE ALFALFA HAY GRINDER, complete with auxiliary equipment. P. O. Box 85, Cozad, Neb.

WHIRLAWAY AIRBLAST CAR LOADERS, cast iron pulleys, new and used feed and elevator equipment. Hagan Mill Machinery, P. O. Box 574, Jefferson City, Mo.

FOR SALE—ENCLOSED MOTORS; RICHardson Scales; truck scales; hammermills; cat crimpers; horizontal and upright feed mixers; sewing machines; elevator legs; screw conveyors; molasses mixers and pellet mills. J. E. Hagan Mill Machinery, Box 574, Jefferson City, Mo.

FOR SALE—ONE 38 DUCT, DOUBLE OR dual verti-flo feed and grain distributor. Can be separated to make two distributors, if needed. Used little. As good as new. Jerome Turkey Farms, Inc., 506 W. Division Avenue, Barron, Wis.; Phone: Lenox 7-3133.

SALE—ALUMINUM TANKS, 18,000, 3,000 gal. Dewatering presses; Davenport No. 1A, 3A, Louisville 8-roll 36". Three Louisville rotary steam tube dryers, 6'x50', 6'x25'. Screw conveyor, trough belt conveyor, bucket elevator, bins, etc. Perry, 1403 N. 6th St., Philadelphia 22, Pa.

FEED MILL EQUIPMENT AT A SAVINGS. Two 57 ft. bucket elevators; one 25 ft. elevator; screw conveyors; pellet mill, complete with steam unit; motors of various horse powers; speed reducers; scales; sewing machines; spouting; time clock; corn cracker; feed mixer, and many other items. Eureka Mills, 800 S. Theresa, St. Louis 3, Mo.; Phone Prospect 1-0769.

MACHINERY WANTED

ALL KINDS OF GOOD USED GRAIN processing machinery. E. H. Beer & Co., Inc., Baltimore 24, Md.

WANTED TO BUY — RICHARDSON scales, bag closing machines and other good mill, feed and elevator equipment. J. E. Hagan Mill Machinery, Jefferson City, Mo.

WANTED—TRUCK SCALES WITH 12 TO 15 ton capacity; 1 or 2 ton mixers; 25 to 75 H.P. hammer mills, complete with motors. Manhan's Poultry Farm, Saybrook, Ill.

HELP WANTED

FEED SALESMAN TO CALL DIRECTLY on farmers. Salary, commission, expenses and transportation. Year around position. Home every night. Address Ad No. 4968, Feedstuffs, Minneapolis 40, Minn.

CHEMIST FOR ANALYTICAL AND DEvelopment work in agricultural department of independent laboratory. Some experience in feeds preferred. Give full details. Address Ad No. 4995, Feedstuffs, Minneapolis 40, Minn.

PUBLIC RELATIONS MAN FOR GROWing agricultural organization. Poultry industry background helpful. State full particulars first letter. All replies strictly confidential. Write Ad No. 4951, Feedstuffs, Minneapolis 40, Minn.

WANTED — WE ARE ALWAYS INTERested in securing the services of men who have what it takes to sell a superior line of feeds to poultrymen and dairymen, bulk or bags, out of our modern, efficient mill. Write or see Barber & Bennett, Inc., P. O. Box 430, Albany, New York.

SALESMAN — NATIONAL FEED MANUfacturer seeking salesman experienced in agricultural field for work in Michigan territory. This is an opportunity to establish a satisfying career in a growing industry. Write with qualifications to W. G. Stokes, District Sales Manager, 12730 Beck Road, Plymouth, Mich.

SALESMAN — TERRITORY STATE OF Ohio. Specialty feed sales including dry dog food, calf meal, minerals, etc. Good nucleus established. Commission basis with guaranteed draw if desired. Ryde & Company, 3939 S. Union Avenue, Chicago 9, Ill.

EDITORIALLY TRAINED MAN WITH experienced working knowledge of country grain elevators and, if possible, feed nutrition and research, for position on trade paper. Please give all qualifications in first letter, experience, education, family, references, salary, etc. Write Ad No. 4989, Feedstuffs, 2832 Board of Trade Bldg., Chicago 4, Ill.

DISTRICT SALES MANAGERS-SALESMEN —Manufacturer animal health products, antibiotic vitamin mineral supplements. Territories open Indiana, Illinois, Iowa, Wisconsin, Michigan, Pennsylvania, New York, other states. Expenses, salary, commission. Give details, experience, references. Address Ad No. 4510, Feedstuffs, Minneapolis 40, Minn.

HELP WANTED

WANTED—FULLY QUALIFIED MAN TO handle dog food department. Give full details. Address Ad No. 4935, Feedstuffs, Minneapolis 40, Minn.

OUTSTANDING OPPORTUNITY FOR young man experienced in grain purchasing, hedging and soybean meal sales. Will assume direction of this department at our new soybean plant located in Guntersville, Ala. Excellent fringe benefits. Send detailed resume of your education and business experience to Allied Mills, Inc., P. O. Box 147, Guntersville, Ala.

GENERAL SALES MANAGER WANTED— Fast growing manufacturers of farm equipment, located in the Midwest, selling through 3,000 dealers in twenty states, need the services of a high class individual to head the sales department. Must be under 45, sober. Farm equipment, feed or other farm related experiences preferred. This is a once in a lifetime opportunity for the right man to join a new successful company where earnings match ability to produce. Starting salary $12,000, plus expenses. Should double in two years. Give details and latest snapshot in first letter. All replies confidential. Write Ad No. 4956, Feedstuffs, Minneapolis 40, Minn.

BUSINESS OPPORTUNITIES

FOR SALE—FEED, SEED, FERTILIZER and produce business. Northern Iowa location, good community. $150,000 volume, inventory plus equipment. Address Ad No. 4981, Feedstuffs, Minneapolis 40, Minn.

FOR SALE—THRIVING FEED BUSINESS in good Missouri location. Mill includes modern equipment and grossed $150,000 in 1958 without outside sales work. Reason for sale, retirement and ill health of long time owner. Financing available. Write Box 57, Houston, Mo.

FOR SALE — SEVERAL GOOD GRAIN elevators and feed mills in Indiana. Financing can be arranged on most, also one feed manufacturing plant in southwestern Indiana, servicing over three hundred wholesale accounts. Boyer & Nail, Real Estate Broker, Milroy, Ind.

New York importer doing business in 48 states through own sales force in agricultural and farm supply products—is interested in making connection with experienced trader/broker in imported feed ingredients, minerals and farm chemicals in order to develop this on a profit-sharing basis. Box No. 4988, Feedstuffs, Minneapolis 40, Minn.

PELLET MILL

Brand New Latest Model 30 H.P. Pell-O-Matic Dry Pellet Mill complete, ready to run with 3 new dies, ¼-⅜-½, fully automatic operation, no steam required, up to 25 sacks per hour. Will sell for cash, less than ½ price $2,850; 10' steel motorized bucket elevator to feed mill if required $150.

ROSS, INC.
12 N.E. 28th St. JA 8-2132
Oklahoma City, Okla.

MISCELLANEOUS

USED MOISTURE TESTERS—Don't pay a fancy price for a new tester when we can sell you an excellent factory reconditioned instrument. All popular makes available. Prices start at $125. Send for FREE CATALOG on grain and seed testing and handling equipment. Barrows Equipment Co., 1316 Sherman Ave., Evanston, Ill.

FOR SALE

Feed & Grain Handling & Processing Equipment

NEW-AND-USED

Scales, Hammermills, Oats Crimpers, Horizontal and Vertical Feed Mixers, Sewing Machines, Elevators, Molasses Mixers, Pellet Mills, Receiving Separators and Grain Cleaners.

E. H. Beer & Co., Inc. Ibsen Ave. & Newkirk St. Balto. 24, Md.

★ Buy and Sell Through WANT ADS ★

Wisconsin Dealers Expand Buying, Merchandising Unit

By Special Correspondent

MADISON, WIS. — A buying and merchandising organization formed by a group of Wisconsin dealers has enlarged its membership in recent months and is planning still further expansion, officials of the group report.

For several years, four dealers bought feed store and mill items jointly, and from that basis a new and larger organization — Independent Dealers Organization Feed & Supply Corp. (I.D.O.), Madison, Wis.—was formed in October, 1958.

Organized with seven members, I.D.O. now has 12 members and plans to expand to 25 or more, officials say. It is planned to keep the membership within a radius of 75 miles of Madison, according to James Howard, general manager, who was employed by the group last December after previously selling for a feed additive supplier.

The 12 member firms have a combined purchasing power of $6 million, many of them doing more than $300,000 annually. Present members include:

Comstock Feed & Seed, Madison and Waunakee, Wis.; Columbus (Wis.) Mills; Arlington (Wis.) Feed & Grain Co.; Sunnyside Feed Mill, Portage, Wis.; Graper Feed Mill, Lake Mills, Wis.; Bowar Feed, Cross Plains, Wis.; Scheldrup Bros., Stoughton, Wis.

Elkhorn (Wis.) Lumber Co.; Dairy Belt Feed & Seed, Wales, Wis.; Cambridge (Wis.) Feed & Seed; Hartford (Wis.) Elevator, and Mapleton (Wis.) Feed & Hardware.

Stan Qualle of Arlington Mills is president and Gene Lang of Columbia Mills is secretary of the corporation.

"This organization is a positive approach toward the problem of helping the small feed mill operator stay independent and enabling him to compete in today's market," says Mr. Howard. "Through cooperative buying, our members take advantage of quantity buying."

While I.D.O. was organized primarily to buy, the officers say, the group is now planning an extensive merchandising program for its members. Already, they note, I.D.O. is selling some products under its own label, including a milk replacer for calves and other products. The group also plans to set up a line of soluble medicaments under its own label and other products.

Basic Requirements

Three basic requirements have been set up for members in I.D.O.: The dealer (1) must have financial strength, (2) must have the proper geographical location for marketing and (3) must have high ethical standards of operation.

"We want only members who have proved their responsibility," states Reginald Comstock, one of the founders.

Mr. Comstock also notes that I.D.O. members are free to buy where they wish. To get the business of members, he said, I.D.O. must offer good buys or other benefits. I.D.O. has received "excellent cooperation from many suppliers," Mr. Howard reports.

He says I.D.O. was organized from the "inside", not the "outside", and that it is "dedicated toward helping the independent dealer."

I.D.O. holds business meetings once a month, reports Mr. Comstock. In addition to the regular business, the members discuss credit, merchandising, financing and other mutual problems.

As part of the merchandising activities, it was noted, Mr. Howard and supplier representatives visit member establishments at their request and put on product information meetings. A series of sales training meetings is now reaching members,

Wholesaler Notes How Distribution Has Changed in Alabama

By Special Correspondent

SCOTTSBORO, ALA.—One of the ways in which integration has changed feed distribution was pointed out here recently.

The smaller feed dealer either gets into contract feeding in some form, or he sees his feed business go elsewhere, said Kenneth H. Butler, a partner in the Butler & Kennamer Wholesale Co. At one time this firm handled wholesale feed directly from the mill and sold it to dozens of feed dealers in this area.

"This business was taken away from us," he notes, "and even though we're doing more now than ever in flour, groceries and other products, our feed accounts have dwindled yearly."

Lawton Kennamer, a partner, says this trend is still continuing, and dozens of small town grocery stores that once sold feed to customers are getting out of it steadily.

"I think our own record will bear this out," he said. "Ten years ago we handled over 70,000 sacks of feed annually, but now this has dwindled to less than 30,000. We still have our old customers and many new ones, but no wholesale firm is selling much feed now. It goes directly from the mills to the dealer, and in many cases directly to the grower in bulk form."

Rural population in this part of Alabama remains about the same, but farm flocks, dairy cattle and hogs have given way to fewer operators who are growing more and more on contract.

PRODUCT TALK—James Howard (left), general manager of Independent Dealers Organization Feed & Supply Corp., Madison, Wis., and Reginald Comstock, dealer member, talk over an I.D.O. label product.

too. Mr. Howard is also helping members to make surveys of their businesses, including a study of time and effort of mill personnel.

Financing Arranged

Mr. Howard said I.D.O. will also help dealers help customers by coordinating financing arrangements. For example, it was explained, one turkey grower who has a flock of 12,000 was able to obtain through the Production Credit Assn. a feed loan with a lower interest rate than offered elsewhere. I.D.O. visits area bankers and other financing agencies to learn their rates and to try to sell them financing for the farmer.

I.D.O. officials say the farmer can remain independent if he follows a program which enables him to have the benefit of good breeding nutrition and management. Outside help is obtained on nutrition matters.

Officers of the organization also mention the importance of feed dealers developing farm supply stores as a profit source. Many members are selling twine and farm supply items.

At present, I.D.O. does not manufacture its own brand of feed, but this may be done later, it was indicated.

In its educational program, I.D.O. is cooperating with county agents and others in staging feeder meetings, officials said.

The group also is launching a sales promotion program which includes newspaper, radio, direct mail and television advertising. Dealers' names are listed in the ads.

Mr. Howard went on to say that the I.D.O. also has a program for balancing members' stocks of items. Merchandise is traded among members on long and short stock. The corporation manager gets out letters listing dealers who are long or short on certain items. Then, he said, the dealers can contact each other and make trades.

FEED STORE DESTROYED

PRINEVILLE, ORE.—A fire destroyed the Prineville Feed Co.'s store and warehouse recently.

cobalt

AGRICULTURAL CHEMICALS

for prompt shipment

Cobalt Carbonate
Cobalt Sulfate
Cobalt Sulfate Monohydrate
Cobalt Nitrate
Cobalt Chloride

write
for this 24 page booklet furnishing information on

	PAGE
Essential Trace Elements in Plant & Animal Nutrition	5
Trace Mineral Compounds	9
Fungicides	12
Weed Killers	14
Miscellaneous Agricultural Compounds	15
Available Literature	16
Supplementary Reading	16

THE HARSHAW CHEMICAL CO.
CLEVELAND 6, OHIO
Chicago • Cincinnati • Cleveland • Detroit • Hastings-On-Hudson
Houston • Los Angeles • Philadelphia • Pittsburgh

CHECKERBOARD GRAIN COMPANY
Buyers and Sellers of
MILLFEEDS, GRAINS AND GRAIN PRODUCTS
CHICAGO KANSAS CITY ST. LOUIS MINNEAPOLIS

Fleischmann's F·I·D·Y
IRRADIATED DRY YEAST
D FOR YOUR POULTRY AND ANIMALS

SHORT OF ROUGHAGE?
Turn to PAXCO DEHYDRATED CORN COB MEAL, as many feed suppliers have. Superior molasses carrier. Cattle like it, get real feeding value from it. Reliable source; stabilized prices. Write today to:
PAXTON PROCESSING CO., INC.
P. O. Box 120 Phone 222 Paxton, Illinois

Free Catalog
EVERYTHING FOR TESTING AND HANDLING GRAIN, FEED AND SEED

Your Burrows catalog contains complete specifications and prices on more than 1,000 important items. Includes grain grading information. Send for your free copy today.
BURROWS
BURROWS EQUIPMENT CO.
1316-C Sherman Ave., Evanston, Ill.

IndEfatigaBle
is the way PK works on bag designs and specifications . . . . .
with an added touch of originality . . .
always something new!

Since 1885
MULTIWALLS • COTTONS • BURLAPS
PERCY KENT BAG COMPANY, INC.
KANSAS CITY
BUFFALO, NEW YORK

VAN DUSEN HARRINGTON
DIVISION
F. H. Peavey & Co.
GRAIN SOYBEANS FLAX
Founded 1852
MINNEAPOLIS DULUTH

PAUL BERG, P. E. • 406 TRANSFER BLDG. • FORT WAYNE 2, IND.
CONSULTATION AND DESIGN
FEED MILL ENGINEERING SERVICE

LA BUDDE
MILWAUKEE, WIS.
MALT SPROUTS
BREWERS GRAINS
DISTILLERS GRAINS
BEET PULP
AND 44 OTHER FEEDS

Workmen's Insurance

CONCORD, N.H.—A bill given final approval by the New Hampshire Legislature will extend workmen's compensation to feed stores and other business and industrial establishments with as few as three employes, and will increase maximum weekly benefits from $37 to $40.

Following its passage by the Senate, House Bill 322 was returned to the House for concurrence on amendments changing the effective date of the proposed law to Sept. 1, and exempting the first three executive officers when computing the number of employes of a corporation to determine whether it has to take out coverage.

Names New Member

ST. JOSEPH, MO.—Joseph E. Allhoff has been elected a member of the St. Joseph Grain Exchange. Mr. Allhoff will manage the new St. Joseph plant of the B & E Grain Co. The firm is currently constructing a 1-million-bushel storage plant here which will be ready for use early in July. The elevator will handle both rail and truck shipments. Headquarters of the company are in Kansas City.

"The weather here in Florida is so wonderful," said the old lady, "how do you tell summer from winter?"

Replied the hotel clerk, "In winter we get Cadillacs, Lincolns and stuffed shirts. In summer we get Chevrolets, Fords and stuffed shorts."

◆ ◆ ◆

There is no greater satisfaction than parking on what is left of the other fellow's nickel.

◆ ◆ ◆

Feed store: The only place in town where you can get a chicken dinner for 10¢.

◆ ◆ ◆

He: Shall we sit in the parlor?
She: No, I'm tired. Let's play tennis.

◆ ◆ ◆

A drunk fell from a two-story window and hit the pavement with a terrific impact. A crowd gathered and as the drunk staggered to his feet someone grabbed him by the arm and asked, "What happened?"

To which the drunk replied, "I dunno, I just got here."

◆ ◆ ◆

When a fellow breaks a date, he usually has to.

When a girl breaks a date, she usually has two.

◆ ◆ ◆

Waitress: "We have everything on the menu today, sir."

Man: "So I see. How about a clean one?"

◆ ◆ ◆

Co-ed: "Daddy, the girl who sits next to me in class has a dress just like mine."

Dad: "So you want a new dress?"

Co-ed: "Well, it would be cheaper than changing colleges."

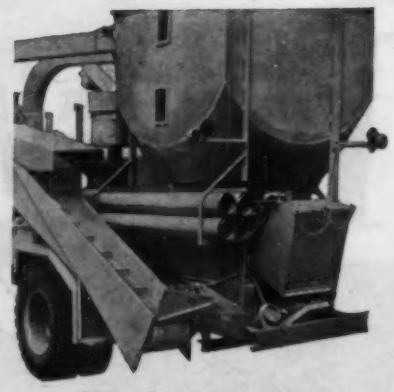
◆ ◆ ◆

News item in an Iowa newspaper: "Local police are puzzled over the finding of a car parked in a lonely neighborhood containing a full case of Scotch whiskey. So far they have found no trace of the owner, but Captain Grady is working hard on the case."

CHAMPION
MOBILE MILL EQUIPMENT

New carrier hauls 8 separate batches of bulk concentrates!

Here's another reason why CHAMPION is your best buy. This new bulk concentrate carrier, produced as regular equipment on Champion mobile mill and mixer units, holds 2½ tons of concentrates in bulk form. The carrier is divided into eight separate compartments, with each compartment having a capacity for 600 lbs. of concentrates. The Champion owner can now pre-weigh bulk concentrates for nine individual batches of feed before leaving his plant—haul a batch in each of the carrier's eight separate compartments—and one batch in the unit's mixer. During feed processing, a screw conveyor feeds the concentrate into the mixer from a selection of any one or more of the compartments. In addition to the bulk carrier, there is ample space on the unit for hauling one more full ton of bagged concentrates. With a Champion you get more for your money, because fast and accurate grinding action, plus the larger 2- to 3-ton mixing capacity, processes a high tonnage of top-quality formula feed at a lower cost per ton, than do units of lesser volume. Champions are built with more capacity, more labor-saving features, and more dependable performance—to provide more and better ON-THE-FARM service. Write for full information.



Air unloading system

Now available on all Champions—the industry's finest, cleanest air system ever installed on any mill and mixer unit. By furnishing both air system and/or auger discharge, Champion units provide complete unloading convenience.

Champions Are Built to Build YOUR Business

CHAMPION PORTABLE MILL CO.
2109 COMO AVE. SOUTHEAST • MINNEAPOLIS 14, MINNESOTA

BEFORE
I was sickly ... rundown until I started on feeds with SUCRO-FLAVOR
TRADEMARK
AFTER
FLAVOR CORPORATION OF AMERICA
3037 North Clark Street • Chicago 14, Illinois

NTF

(Continued from page 1)

major political parties, which indicates no new type farm legislation can be enacted this year. "Neither of the major political parties wishes to have the other receive credit for a worthwhile new program or to have the blame if a new type program should prove ineffective," NTF spokesmen said. "This, plus a definite stand in opposition to a turkey enabling act by the American Farm Bureau Federation, resulted in the U.S. Department of Agriculture reversing its anticipated position. Earlier conferences with top USDA officials had given NTF leaders rather definite assurance the department would take a favorable position this year."

Another major matter of business at the NTF meeting was a progress report and discussion relative to possible mandatory grading and sex labeling. Plans were mapped for further study of the possible effect of such a program on the industry.

It was decided that the 1961 National Turkey Federation Convention be held at the Conrad Hilton Hotel in Chicago Jan. 4-6, 1961. Plans were reviewed for the 1960 convention to be held in Minneapolis Jan. 5-7, 1960.

New types of promotion and advertising programs for turkeys were discussed.

It was reported that the NTF group insurance plan inaugurated two years ago was operating so effectively it is anticipated dividend payments can be paid soon to participating members. Since inception of the plan, a total of $77,594.52 has been paid in claims, of which $22,500.00 has been paid for life insurance claims and $55,094.52 for hospitalization and surgical claims.

A detailed report was made on the new agricultural trust developed by the federation. The trust has been approved by the Internal Revenue Department and this new business management service is now available to members. Producers and others related to the turkey industry will be able to obtain assistance in planning their business operations for greater tax savings and employee relationships.

Officers Present

The following officers and executive committee members attended the meeting: Walter Schwedler, president, Portland, Ore.; C. N. Thurnbeck, first vice president, Forest Lake, Minn.; Carl Stout, second vice president, Richland, Mo.; Morris G. Smith, third vice president, Ellicott City, Md.; Robert M. McPherrin, fourth vice president, Sunnymeade, Cal.; M. C. Small, executive secretary-treasurer, Mt. Morris, Ill.; Raymond Higgins, Hot Springs, Ark.; Ray Thompson, Ellsworth, Iowa, and Herbert G. Beyers, Salt Lake City, Utah.

Officers and representatives of the Oregon Turkey Improvement Assn. served as hosts for the meeting and had a planned program of golf, swimming, dancing and other entertainment.

SOYBEAN MEAL

(Continued from page 1)

month during the same period, "there still will be almost 50 million bushels of soybeans to carry into the new crop year," Mr. Brewster noted.

"There are plenty of beans available to process, but indications are for drastic curtailment by many processors. Where soybean meal buyers historically have gauged their summer purchase program on the basis of raw material supplies, they must now look for some other logical 'hitching post'."

Mr. Brewster said poor conversion margins are the primary reason for the estimated lower crush in the last quarter of the crop year. Margins during the first four months of this crop year were quite satisfactory to the soybean processor, he said. "Then, in February, these margins began to deteriorate. During March and April there was much talk about plant shutdowns. A few of the smaller processors did take some down time, attempting to preserve a little of the profits earned earlier in the year. But when the monthly crush figures came out, production was still at record levels."

May, Mr. Brewster said, was the "straw that broke the camel's back." Margins in that month became "so poor that even some of the larger processors made arrangements for plant shutdowns."

Sales School

SYRACUSE, N.Y.—Several feed men were among those who attended the National Sales Executives' School of Sales Management and Marketing at Syracuse University. The three-week course covered various phases of sales management. Feed men present included D. G. Wiltz, feed division, Farmers Union Grain Terminal Assn., St. Paul; Frank K. Dalrymple, McMillen Feed Mills, Memphis; Leland Higgins, also with McMillen, Ft. Wayne, Ind., and Marshall Backus, Cooperative G.L.F. Exchange, Inc., Ithaca, N.Y.

NEW ELEVATOR

JEFFERSON, ORE.—A new $115,000 elevator and warehouse is being erected here, reports Bill Moye, manager. The 106 ft. high elevator will have a 600-ton grain capacity with five airlifts. The wood frame building will be 60 by 120 ft.

HOG 'MOTEL'

(Continued from page 1)

hogs. Fred and Max have tentative plans for another similar building, which may be a little larger—big enough for up to 700 hogs.

Max acknowledged that the Miller hog "motel," believed to be the first and only one of its kind in the U.S., "is helping to oversupply the pork market," but he also believes that the "motel" is a "step away from integration."

Explaining his remarks, Max said the Miller hog operation enables producers to have more hogs on feed than they could without the services of the Hog Motel. He noted that farmers in the area who have hogs in the Miller setup continue to feed hogs at home. He said one producer was planning to feed four farrowings a year—two on his own farm and two in the Hog Motel lots. Max believes the custom feeding unit is helping hog producers in the Oakland area remain independent.

The Millers mix Kent concentrates with their own grains, grown on their farm land, for feeding to the "motel" hogs. They have a grinder and mixer near the 10 feeding pens, which are each big enough for 50 hogs. Max and Fred are mulling over the possibility of installing a pelleting machine—and they say they may do just that.

Most of the Millers' crop land this year is in corn—375 acres—but they also grow soybeans. The 500 hogs managed by the Millers consume 10-15 tons of mixed feed a week.

None of the "motel" hogs are owned by the Millers, but they do feed some for themselves at another location.

Though requirements weren't so stiff at the outset, only weanling pigs at least 40 lb. are accepted by the Millers. And these pigs must have been castrated and vaccinated for hog cholera and erysipelas. Another requirement is that the pigs must be contracted in 50-head lots because of the capacity of each of the 10 pens.

225-lb. Maximum

Unless special arrangements are made, agreements made by hog owners with the Millers specify that the animals must be marketed at weights no greater than 225 lb. Hogs are expected to reach market weights in about 100 days, and their owners are billed at the end of each month for feed, labor and housing.

Max said that it's possible for a farmer to have the Millers provide the shelter, space and labor for feeding his hogs for "nothing." Here's how he explained this possibility: 2¢ a day for 100 days of feeding is $2. It's reasonable to assume, he said, that in some cases the Hog Motel can handle a farmer's hogs for a penny a pound less than the farmer can himself. Approximately 200 pounds of gain at the "motel" could mean a saving of roughly $2—about the same as the $2 the Millers get for housing and labor.

An adjustment the Millers plan to make in their charges involves veterinary services. When their custom hog lot was started May 1, Max and Fred agreed to pay for vet expenses. In the future, however, owners of the pigs will have to stand this cost.

The Oakland confinement feeding area is air-conditioned, has a manure cleaner, self feeders and a system for automatically supplying water or water containing antibiotics or worming solution.

The Miller brothers use the manure from the hogs for fertilizing their crop land.

HOGS

(Continued from page 1)

the early crop of spring pigs seem to preclude any chances for permanent improvement in the market for the rest of the year.)

Citing the recent pig crop report, USDA noted that a total 1959 pig crop of 104.5 million is in prospect, 10% larger than the 1958 crop. The prospective 1959 crop will provide more pork per person in the next 12 months than in any year since early in the 1950's.

The spring pig crop was up 12% and the prospective fall crop is up 9%. The fall pig estimate is based on farmers' intentions to farrow 8% more sows, with a slight uptrend assumed in size of litter. If the fall intentions are carried out, farrowings this fall (June-November) will be a sharp 25% greater than two years ago. The number of pigs would be up 27%.

The effect of larger production since last fall has resulted in declining prices until March, when they leveled out, say the USDA economists. In late June they had not yet shown any signs of a summer advance and were about $7 per cwt. below a year before. Some increase is still possible this summer, but it will be small, according to the economists.

A heat wave in June reducing demand for meat, large hog slaughter until late May and expectations of early slaughtering of spring hogs are among the factors blocking a summer price advance, according to the USDA report.

To Moderate Decline

USDA economists say there will be a tendency toward earlier farrowings and marketings than usual because of producers' fear of price declines. The economists add that while the out-movement of pork stocks and early marketing of spring pigs will restrain any summer advance in price, they will also moderate the fall decline. Prices this fall will be the lowest since early 1956, but are not expected to drop as low as in the fall of 1955.

Prices next winter and spring will be lower than in the same seasons this year if 9% more pigs are saved this fall, according to the USDA report. A dull market is expected then, with narrow profits to producers and little encouragement for further increase in production.

The incentive toward further expansion in hogs is already beginning to diminish, according to the USDA economists. They say the hog-corn ratio is back to near its long term average level after an exceptionally high level a year ago.

However, the economists say the expansion might not be entirely checked by next spring because cyclical increases in hog production often carry forward further than indicated by current price ratios. The size of 1960 spring farrowings, and the prices resulting in the fall, will be the critical point in the current hog cycle.

HOG PRICE OUTLOOK GETS DIMMER

MANHATTAN, KANSAS — The outlook for fat hog prices gets dimmer. Agricultural economists at Kansas State University, Manhattan, have lowered their forecast for November by $1. In the July issue of the Kansas Agricultural Situation they predict fat hog prices in November will be around $12@13.

Fed cattle prices in November look dark, too. The economists now say prices for choice fed cattle could drop below $25 in November.

For July, prices were expected to be as follows: Grade A eggs, higher; wool, fryers, broilers, slightly higher; grade B eggs and current receipts, steady to slightly higher; grade A milk, manufacturing milk, farm hens, corn, sorghum grain and soybeans, steady; stocker and feeder cattle and hogs, steady to slightly lower; slaughter cattle and oats, slightly lower; wheat and spring lambs, lower.

TOP OF THE HOPPER

(Continued from page 1)

over-extended. The economists were amazingly accurate a few years ago when they predicted larger and fewer farms—larger and fewer feed firms. Already this year there has been a noticeable increase in the number of feed firms in Pennsylvania that have gone out of business, changed hands or been merged. Right now, a few old, established, highly reputable firms are in serious financial difficulty. Of greater significance, however, is the news just 'leaked' to us that one major commercial manufacturer now moves more tonnage in Pennsylvania in direct sales to farmers than in wholesale sales to its dealers. What's more, its current pricing policy has raised eyebrows all of the state, and induced at least one other major manufacturer to follow suit. Whether fact or fancy, it is this sort of thing that could very easily trigger a disastrous 'feed price war.'"

♥ ♥

MANY CAMPAIGNS ARE CONDUCTED to increase the market for a particular food commodity—but usually at the expense of another commodity since total pounds of food consumed per person are pretty stable. One of the latest promotions is different. It's the "Spud Gun," already a popping success in New York, with sales exceeding a million guns. Stores throughout the country are now promoting this harmless potato pellet gun. This could be the biggest thing since the hula hoop, one ag economist noted, and it could get rid of a lot of surplus spuds. The spud gun distributors figure each child will shoot off a minimum of 12 pounds of potatoes. The firm marketing the gun plans to sell 10 million of them—which would mean an added market for more than 100 million pounds of potatoes. The next thing may be that some eager congressman will come up with an idea for an "Egg Gun" that would splatter eggs around the countryside.

The FEED MARKET

PRICE QUOTATIONS, MARKET TRENDS
OF PRINCIPAL INGREDIENTS

A AND D FEEDING OIL

New York: Demand and supply good; trend firm; price per lb. in 55-gal. drums (413 to 420 lb.): 300 ICU, 750 A 13½@15½¢, 1,500 A 15½@17¢, 2,250 A 17½@20¢, 3,000 A 19@21¢; 600 ICU, 1,500 A 16@18¢, 2,250 A 18@19½¢; f.o.b. Massachusetts, New York or Pennsylvania.

Denver: Demand fair; trend steady; supply ample; 2,250 A, 300 D 22¢ lb., f.o.b. Denver.

Boston: Demand and supply steady; 600 D, 1,500 A 17½¢ lb.; 300 D, 2,250 A 18¢; 300 D, 1,500 A 16½¢; 300 D, 750 A 14½¢; 400 D, 3,000 A 20¢; 300 D, 3,000 A 19½¢; 75 D, 750 A 14½¢.

Minneapolis: Demand good; trend steady; supply ample; 10,000 A 37¢ lb.; 300 D, 2,250 A 20½¢ lb.; 300 D, 1,500 A 18¢ lb.; 300 D, 750 A 16½¢ lb.

Chicago: Demand fair; trend steady; supply ample; straight A feeding oil, with 10,000 units vitamin A per gram, 7@7¼¢ a million units of vitamin A, l.c.l., packed in 55-gal. drums, f.o.b. Chicago, drums included.

ALFALFA MEAL

Denver: Demand fair; trend weak; supply ample; dehydrated $54, Denver.

Boston: Demand slow; supply plentiful; dehydrated, 17% $56@57; suncured, 13% $47, nominal.

Omaha: Demand good; trend strong; supply tight; 17% dehydrated, 100,000 A units bulk pellets $38; sacked meal $41, Omaha basis.

Portland: Demand good; trend higher; supply limited; suncured, 15% $40; dehydrated $63.40.

Ft. Worth: Demand excellent on dehydrated, slow on suncured; offerings somewhat limited on good quality dehydrated, sufficient on suncured; Texas production, 17%, 100,000 A $48, truck; suncured 13%, ¼-in. grind, No. 1 $39@42, truck.

Los Angeles: Demand and trend steady; supply adequate; dehydrated meal, 17% protein, 100,000 A $50, bulk; dehydrated pellet meal, 17% protein, 100,000 A $52@53, bulk; suncured meal, 15% protein $42@43, bulk; suncured crumbles, 15% protein $44@45, bulk.

Philadelphia: Demand and supply fair; 17% dehydrated $58.

St. Louis: Suncured, 13% fine $40, demand slow, trend steady, supply ample; dehydrated, 17%, 100,000 A $48, demand fair, trend steady, supply ample.

Memphis: Demand fair; trend steady to higher; supply ample; dehydrated, 17% protein, guaranteed 100,000 units vitamin A $49.

New Orleans: Demand steady; trend firm; supply adequate; vitamin A, 17% $56@56; pellets $51@52.

Cincinnati: Demand fair; trend steady; supply adequate; 17% dehydrated, 100,000 vitamin A $55.50@58.50.

Chicago: Demand fair; trend easier; supply ample; 17% protein dehydrated, with 100,000 units vitamin A guaranteed, carlots $47.50.

Kansas City: Demand active and strong demand with considerable interest being shown in forward bookings; trend strong, with $2 increase considered likely for next week; supply adequate, though much material is being put into storage and offerings are not liberal; dehydrated alfalfa meal with 17% protein and 100,000 units vitamin A guaranteed on arrival: regular meal $42@43, sacked; reground pellets $43, sacked; reground pellets, greased $45; pellets $38, bulk; 18% protein, 125,000 units A meal $47@48, sacked; suncured meal offerings are very light and demand is slow, No. 1 fine ground $37.50@39, No. 1 ¼-in. $36@37, No. 2 ¼-in. $34.50@35.50, sacked.

Buffalo: Demand good; trend steady; supply fair; $59, sacked, Boston.

Minneapolis: Strong interest in buying, especially for futures; advanced prices expected, some mixers buying now and storing for winter use; 17% dehydrated, 100,000 units vitamin A, reground pellets $44@48, bulk; oiled reground $46@50, bulk.

Seattle: Demand fair; trend steady; supply good; 15% protein suncured $45, delivered, truck loads; 136,000 A unit dehydrated $68, delivered, truck loads.

ANIMAL FAT (STABILIZED)

St. Paul: Feed industry demand remains good, but little buying in Chicago and on East Coast by soap manufacturers and a reduction in exports has weakened market for bleachable fancy tallow, off ¼¢ this week at 6½¢ lb., f.o.b. producer's plant.

San Francisco: Demand fair; supply ample; bleachable fancy 7¼¢ lb.; yellow grease 6¼¢ lb.

Boston: Demand and supply steady; tallow 7¼¢ lb.; yellow grease 6¾¢ lb.

Ft. Worth: Demand fair; supply ample; prime tallow, tank cars 6¾¢ lb.; drums 8¼¢ lb., f.o.b. north Texas packing plants with returnable drums.

New Orleans: Demand fair; trend steady; supply adequate; 8¾@7¢ lb., tank cars.

Louisville: Demand dull; trend weak; supply good; no export buying along with vacation season; bleachable white 6¾¢ lb., off ¼¢; white tallow 7¼¢ lb., off ¼¢; yellow grease 5¾¢ lb., of ¼¢.

Chicago: Demand fair; trend easier; supply adequate; bleachable fancy tallow, tank, truck or carlots $6.87½ cwt.; yellow grease $6.62½ cwt.

Kansas City: Demand slow; trend steady; supply ample; bleachable prime tallow 6¾¢ lb., tank car.

Atlanta: Demand good; trend steady; supply good; 7¾¢ lb., bulk, f.o.b. Georgia and Alabama producing mills.

NOTE: Quotations on feed ingredients shown in these and adjoining columns are wholesale prices, per ton, bagged, for prompt delivery, unless otherwise noted. They are the latest quotations available from Feedstuffs correspondents and are not necessarily those in effect on date of publication. The prices represent fair average trading values and do not necessarily represent extreme low or high levels at which individual sales might have occurred. A descriptive summary of supply and demand factors prevalent in the feed market appears on page 2.

BARLEY FEED

New Orleans: Demand slow; trend unchanged; supply ample; $59@60.

Boston: Demand slow; supply good; $46.

Portland: Demand slow; trend lower; supply ample; rolled $57; ground $55.

Milwaukee: Demand good; supply fair; needles $5¢@$1.05 cwt.; ground screenings $25, sacked.

Ogden: Supply average; rolled $52@57; whole barley $44@49.

San Francisco: Demand fair; supply ample; rolled $61.57; ground $60.56.

Los Angeles: Demand slow; trend weaker; supply ample; standard rolled $2.95 cwt., sacked; standard ground $2.95 cwt., sacked.

Philadelphia: Demand slow; supply fair; pulverized $48.

Chicago: Demand quiet; trend steady; supply fair; $36, carlots.

Baltimore: Demand quiet; trend steady; supply fair; $46.50, carlots.

Seattle: Demand fair; trend easy; supply good; $44, bulk, truck loads, new crop.

BENTONITE (SODIUM)

Denver: Demand fair; trend good; supply ample; $23.

Cincinnati: Demand steady; supply adequate; f.o.b. Cincinnati, minimum 30-ton carlots: 80 granular $31.50; 200 mesh fine $31.

Chicago: Demand steady; trend firm; supply adequate; f.o.b. Wyoming and South Dakota shipping points: granular, 30 mesh $16.50; fine granular, 80 to 100 mesh $13.75; powder, 200 mesh $13.50, f.o.b. Belle Fourche, S.D., minimum 30-ton carlots, 80 granular $13.50 net; 200 mesh, fine $13.25 net.

BLOOD FLOUR

Louisville: Demand dull; trend steady; supply good; $80@85.

BLOOD MEAL

Los Angeles: Demand slow; trend steady; supply ample; $6 a unit of ammonia.

San Francisco: Demand fair; supply ample; $6.25 a unit of ammonia.

Ogden: Supply average; $100 in 100-lb. bags, f.o.b. Ogden.

New Orleans: Demand slow; trend unchanged; supply normal; $90@95.

Louisville: Demand dull; trend steady; supply good; $80@85.

Portland: Demand slow; trend lower; supply ample; $120.

Chicago: Demand fair; trend steady; supply ample; $130, carlots, 100-lb. bags, guaranteed 80% protein.

BONE MEAL (STEAMED)

Boston: Demand and supply steady; $90.

Denver: Demand good; trend firm; supply ample; $103.20, Denver.

San Francisco: Demand good; supply ample; $75.

New Orleans: Demand fair; trend firm; supply light; $100@103.

Ft. Worth: Demand good; supply light; $90, sacked, f.o.b. Ft. Worth, local manufacture.

Los Angeles: Demand fair; trend unchanged; supply adequate; imported $78, in 20-ton lots.

Louisville: Demand dull; trend steady; supply light; $80@85.

Portland: Demand slow; supply ample; trend unchanged; $102.

Cincinnati: Demand fair; trend steady; supply ample; $100, Cincinnati.

Buffalo: Demand good; trend steady; supply limited; $105, sacked.

Chicago: Demand fair; trend steady; supply ample; $100, carlots, in 50-lb. bags.

Seattle: Demand good; trend firm; supply limited; $89, delivered, truck lots.

BREWERS DRIED GRAINS

Philadelphia: Demand and supply fair; $80.

Ft. Worth: Demand fair; supply sufficient; 26% protein $49@50, July, delivered Ft. Worth.

Boston: Demand spotty; supply fair; 22% $50; 26% $51.

Milwaukee: Demand good; supply fair; $46.

St. Louis: Demand fair; trend steady; supply ample; $42.

San Francisco: Demand fair; supply ample; $54.

Los Angeles: Demand slow; trend unchanged; supply adequate; $49.50 bulk, $53.50 sacked.

New Orleans: Demand fair; trend easy; supply ample; $50@51.50.

Louisville: Demand slow; trend steady; supply good; $45.

Cincinnati: Demand fair; trend steady; supply adequate; $52.50.

Buffalo: Demand fair; trend lower; supply good; $39, bulk, Boston.

Chicago: Demand fair; trend steady; supply ample; 26% protein, carlots $45.50.

BREWERS DRIED YEAST

Omaha: 10½¢ lb.

Denver: Demand light; trend steady; supply ample; 9¢ lb., f.o.b. Golden, Colo.

Los Angeles: Demand slow; trend unchanged; supply adequate; 10¢ lb., 5-ton lots; 11¢ lb., 1-ton lots; 12¢ lb., less than 1-ton lots.

Louisville: Demand slow; trend steady; supply normal; 10@10½¢ lb.

Buffalo: Demand fair; trend steady; supply ample; $9.35 cwt.

Milwaukee: Demand good; trend steady; supply fair; 10@11¢ lb. in carlots; 10½@12¼¢ lb., l.c.l.

Chicago: Demand good; trend steady; supply fair; 9½@10½¢ lb. in carlots; 9¾@12¼¢ lb., l.c.l.

St. Louis: Demand good; trend steady; supply ample; 9½@10¢ lb. in carlots; 10½¢ lb. in ton lots; 11½¢ lb. in less than ton lots.

Seattle: Demand slow; trend steady; supply ample; $12 cwt.

San Francisco: Demand fair; supply good; 10¢ lb.

Portland: Demand good; supply ample; trend unchanged; 8½¢ lb.

Boston: Demand and supply steady; live cell 11¢ lb.

Cincinnati: Carlots 10¢ lb.; 5-ton lots 11¢ lb.; ton lots 11½¢ lb.

Pittsburgh: Carlots 10¢ lb.; 5-ton lots 11¢ lb.; ton lots 11½¢ lb.

New Orleans: Carlots 10¢ lb.; 5-ton lots 11¢ lb.; ton lots 11½¢ lb.

New York: Carlots 9½¢ lb.; 10-ton lots 10¢ lb.; 5-ton lots 10½¢ lb.; ton lots 11¢ lb., f.o.b. New Jersey.

BUTTERMILK-CONDENSED

Louisville: Demand dull; trend steady; supply nil; $4.25 cwt., nominal.

Boston: Demand slow; supply tight; 3¾¢ lb.

Wichita: Demand slow; supply negligible; $2.90 cwt. in barrels.

Los Angeles: Demand slow; trend unchanged; supply adequate; 5½¢ lb. in 100-lb. lots; 4½¢ lb. in 500-lb. lots.

Ogden: Supply normal; $4.40 in 100-lb. drums.

San Francisco: Demand fair; supply good; $5 cwt.

New Orleans: Demand slow; trend unchanged; supply average; $4.25@4.30 cwt.

Philadelphia: Demand slow; supply light; $4.25.

Chicago: Demand fair; trend steady; supply ample; $3.25@3.50 cwt., carlots.

CALCITE CRYSTALS AND FLOUR

(All prices net, including freight)

New York: Crystals $15.28, flour $10.28.
Buffalo: Crystals $16.11, flour $11.11.
Toledo: Crystals $17.96, flour $12.96.
Boston: Crystals $16.53, flour $11.63.
Limecrest, N.J.: Crystals $10.50, flour $5.50.

CALCIUM CARBONATE

Los Angeles: Demand fair; trend steady; supply ample; flour $10.15, sacked, 20-ton cars; meal $11.15, sacked, 20-ton cars.

Cincinnati: Demand fair; trend steady; supply adequate; $8@9 cwt.

Chicago: Demand steady; trend firm; supply adequate; fine grind, plain, 100-lb. bags $9.54; bulk, in hopper cars $7.54; bulk in boxcars $8.04; granular grind $1 premium.

Seattle: Demand and trend steady; supply good; $14, ex-warehouse, truck lots.

Minneapolis: Fine grind, 50-lb. bag $12.25, 100-lb. bag $11.50; bulk, boxcar $10; bulk hopper $9.50; coarse grind $1 premium, delivered Minneapolis.

CHARCOAL

San Francisco: Demand steady; supply ample; $141.

Los Angeles: Demand slow; trend unchanged; supply adequate; $156, sacked, in less than ton lots; $144.40, sacked, in ton lots.

Boston: Demand and supply steady; $100.

Chicago: Demand fair; trend steady; supply ample; $110 in 50-lb. multiwalls.

COCONUT OIL MEAL

Los Angeles: Demand steady; trend unchanged; supply limited; copra cake $81@82, bulk.

San Francisco: Demand good; supply tight; $66.

Portland: Demand slow; supply ample; trend unchanged; $68.

Seattle: Demand fair; trend steady; supply ample; $75, delivered via truck (California).

COD LIVER OIL (FORTIFIED)

New York: Demand and supply good; trend firm; price per lb. in 55-gal. drums (413 to 420 lb.): 300 ICU, 750 A 14½@15½¢, 1,500 A 15½@20¢, 2,250 A 18½@21¢, 3,000 A 21½@23¢; 600 ICU, 1,500 A 17½@19½¢, 2,250 A 20@22¢, 3,000 A 22@23¢; f.o.b. Massachusetts, New York or Pennsylvania.

Boston: Demand fair; supply adequate; 600 D, 2,250 A 19¢ lb.; 300 D, 3,000 A 20½¢; 300 D, 2,250 A 18½¢; 600 D, 1,500 A 18¢; 300 D, 1,500 A 17¢.

CONDENSED FISH SOLUBLES

New York: Demand fair; trend steady; supply tight; 3⅞@4¢ lb., f.o.b. eastern shore.

Denver: Demand fair; trend steady; supply ample; dried $182.40, Denver.

Los Angeles: Demand slow; trend unchanged; supply adequate; 4½¢ lb.

Boston: Demand good; supply adequate; 4¾@5¢ lb.

CORN GLUTEN FEED AND MEAL

(All quotations for all cities are sacked basis, bulk basis $5 less)

Minneapolis: Feed $44.90, meal $67.90.
Atlanta: Feed $50.98, meal $73.98.
Birmingham: Feed $49.64, meal $72.64.
Boston: Feed $49.84, meal $72.84.
Chicago: Feed $38, meal $61.
Cleveland: Feed $46.14, meal $69.14.
Denver: Feed $48.51, meal $71.51.
Ft. Worth: Feed $46.96, meal $69.96.
Indianapolis: Feed $43.36, meal $66.36.
Kansas City: Feed $38, meal $61.
Louisville: Feed $45.21, meal $68.21.
New Orleans: Feed $48.20, meal $71.20.
New York: Feed $49.43, meal $72.43.
Norfolk: Feed $48.71, meal $71.71.
Philadelphia: Feed $49.02, meal $72.02.
Pittsburgh: Feed $46.96, meal $69.96.
St. Louis: Feed $38, meal $61.

CORN OIL MEAL

Louisville: Demand slow; trend firm; supply ample; $47.45.

Cincinnati: Demand fair; trend steady; supply adequate; $44.50.

COTTONSEED OIL MEAL

Boston: Demand poor; supply ample; $80.50.

Wichita: Demand fair; supply sufficient; 41% old process $71.50.

Los Angeles: Demand moderate; trend unchanged; supply tight; $73, bulk.

San Francisco: Demand good; supply tight; 41% $76; 44% $78.50.

Memphis: Demand poor; trend steady; supply small; prime 41% protein, old process $65, sacked; new process, 41% solvent $64, sacked.

Omaha: Demand easy; trend steady; supply tight; 41% solvent $69.10, bulk, delivered Omaha.

New Orleans: Demand poor; supply limited; trend steady; $74@75.

St. Louis: Demand slow; trend steady; supply limited; solvent $68.50.

Ogden: Supply normal; 41% $80@85.

Ft. Worth: Demand poor; supply sufficient; 41% old process $69, solvent 1% fat added $63; pellets $2 additional; cottonseed hulls $21.

Portland: Demand slow; supply ample; trend unchanged; $79.

Louisville: Demand slow; trend strong; supply light; old process $71; new process $70.

Philadelphia: Demand slow; supply fair; $79.

Denver: Demand fair; trend steady; supply ample; 2% fat $70.60, Denver.

Cincinnati: Demand poor; trend higher; supply adequate; $71.60.

Buffalo: Demand poor; trend steady to higher; supply fair; $83.50, sacked, Boston.

Chicago: Demand improved; trend higher; supply light; hydraulic, carlots $65; solvent, carlots $65, both Memphis basis.

Kansas City: Demand slow; trend steady; supply adequate for demand but light; old process $64.50@65, sacked, Memphis; solvent $64@64.50.

Atlanta: Demand fair; trend steady; supply limited; 41% $67, f.o.b. Alabama producing mills.

Seattle: Demand fair; trend steady; supply ample; $85, delivered, truck lots, 41% expeller process.

CURACAO PHOSPHATE

New York: Trend steady; ground Curacao phosphate in 100-lb. bags $48, f.o.b. cars or trucks, New Orleans, Jacksonville, Fla., or Philadelphia.

D ACTIVATED ANIMAL STEROL (POWDERED)

New York: Demand and supply good; trend firm; price per lb. in 50- and 100-lb. bags, or 100-lb. drums: 1,500 ICU 8@12¢ bagged, 12@13¢ drums; 3,000 ICU 13@17¢ bagged, 17@18¢ drums; f.o.b. or delivered basis Pennsylvania, Delaware or New York.

Cincinnati: Demand fair; trend steady; supply ample; 1,500 ICU 11@12¢ lb.; 3,000 ICU 18¢ lb., warehouse.

Kansas City: Demand fair; trend steady; supply adequate; 1,500 ICU 9¾@10¢ lb.; 3,000 ICU 11½@12¢ lb., in ton lots.

D ACTIVATED PLANT STEROL (POWDERED)

Chicago: Demand good; supply fair; 4,000,000 U.S.P. units per lb., 15¢ lb. in ton lots, less than ton lots 17¢ lb.; 12,000,000 units per lb., 5 tons to a carload 28¢ lb., ton lots and less 30¢ lb.

DEFLUORINATED PHOSPHATE

Tupelo, Miss.: Minimum phosphorus 13%, minimum calcium 31%, maximum fluorine .12%, $51 net ton, f.o.b. Tupelo in 100-lb. multiwall bags, $48 in bulk.

Wales, Tenn.: Minimum phosphorus 18%, minimum calcium 33%, maximum calcium 36%, maximum fluorine .18% $69.12 net ton, f.o.b. Wales in 100-lb. multiwall bags, $3 less in bulk.

Houston: Minimum phosphorus 19%, minimum calcium 32%, maximum calcium 35%, maximum fluorine .19% $71.50, net ton, f.o.b. Houston, 100-lb. multiwall paper bags, $68.50 in bulk.

Coronet, Fla.: Minimum phosphorus 18%, minimum calcium 31%, maximum calcium 34%, maximum fluorine .18%; carlots $63.50, truck load $64.25, net ton, f.o.b. Coronet in 100-lb. multiwall bags $60.50 and $61.25 in bulk.

Cincinnati: 18% phosphorus $81; 13% phosphorus $64.98, f.o.b. Cincinnati.

DICALCIUM PHOSPHATE

Chicago: Stock food grade, 18.5% phosphorus, 20,000 lb. or more $83.25 net ton in 100-lb. papers, basis Chicago Heights, Ill., or Nashville, Tenn.; less than 20,000 lb. $93.25; 21% phosphorus, 20,000 lb. or more $94.50, basis Chicago Heights and Nashville; less than 20,000 lb. $104.50; bulk boxcars or hoppers $3 net ton less than bagged material.

Bonnie, Fla.: Minimum phosphorus 18½%, granular $83.25; freight equalized with closest producing point, carload basis.

Texas City, Texas: 18.5% minimum phosphorus, 21% minimum calcium, 24% maximum, granular $77.70 net ton, f.o.b. Texas City in 100-lb. multiwall bags; bulk, boxcars and hoppers, $5 net ton less than bagged material.

Columbia, Tenn.: Minimum phosphorus 18½%, minimum 25% calcium, maximum .01% fluorine guaranteed $83.25, f.o.b. Columbia, in 100-lb. multiwall bags; freight equalized with nearest producing point, carload basis; bulk $3 ton less.

Trenton, Mich.: Minimum phosphorus 18½%, maximum fluorine 0.003% guaran-

teed $82.25, f.o.b. Trenton in 100-lb. multiwalls; minimum phosphorus 21% maximum fluorine 0.003% guaranteed $94.50, f.o.b. Trenton in 100-lb. multiwall bags.

Minneapolis: 18.5% phosphorus, 24% calcium granular or fine ground $94.10, delivered; $3 less in bulk.

Denver: Demand fair; trend steady; supply ample; $93.60, delivered in Denver.

Cincinnati: 18½% phosphorus $92@93.

DISTILLERS DRIED GRAINS

Louisville: Demand slow; trend steady; supply fair; production light to mid fall; bourbon grains: light $50, dark $52, solubles $77.

Philadelphia: Demand slow; trend unsettled; supply light; $61.50.

San Francisco: Demand fair; supply ample; solubles $85.

Boston: Demand and supply steady; light and dark $56.

Cincinnati: Demand fair; trend steady; supply adequate; $52.50.

Buffalo: Demand and supply fair; trend steady; $56, bulk, Boston.

Seattle: Demand good; trend steady; supply limited; $67.50, delivered, truck lots.

DRIED BEET PULP

Boston: Demand slow; supply adequate; $59.50.

Denver: Demand good; trend steady; supply ample; $49.23, delivered in Denver.

New Orleans: Demand fair; trend steady; supply limited; $60@61.

Milwaukee: Demand good; supply fair; plain $53; molasses $53.

San Francisco: Demand good; supply fair; $51.80, bulk.

Ogden: Supply nominal (supply exhausted); $44@48.

Ft. Worth: Demand slow; offerings light; carlots, 50-lb. papers $63, July, delivered Ft. Worth.

Los Angeles: Demand steady; trend easier; supply increased, new crop; $47.80@50, bulk, nearby/July.

Buffalo: Demand fair; trend steady; supply fair; $60, sacked, Boston.

Portland: Demand good; supply limited; trend unchanged; $59.

Atlanta: Demand fair; trend steady; supply limited; $68.25, delivered.

Seattle: Demand good; trend firm; supply limited; $52, delivered, carlots.

DRIED BUTTERMILK

New Orleans: Demand fair; trend easy; supply normal; $11.50@12 cwt.

Milwaukee: Demand and supply fair; $10.50.

Buffalo: Demand good; trend steady; supply limited; $11.85 cwt.

Chicago: Demand good; trend steady; supply fair; medium acid $10.75@11 cwt., carlots; sweet cream $11@11.25 cwt., carlots.

Los Angeles: Demand slow; trend unchanged; supply adequate; 11¾¢ lb.

Ogden: Supply normal; $8.50, 100-lb. bag.

San Francisco: Demand fair; supply ample; 11¼¢ lb.

Louisville: Demand slow; trend steady; supply normal; 11½@12¢ lb.

DRIED CITRUS PULP

New Orleans: Demand fair; supply good; trend strong; $35@40, f.o.b. Florida points.

San Francisco: Demand and supply fair; meal $54.

Buffalo: Demand poor; trend steady; supply adequate; $38.50, sacked, f.o.b. Florida points.

Los Angeles: Demand good; trend steady; supply moderate; orange pulp $43, bulk; lemon pulp $42, bulk.

Boston: Demand and supply fair; $35, f.o.b. shipping points.

Atlanta: Demand fair; trend steady; supply good; $45, f.o.b. Florida producing mills.

DRIED SKIM MILK

Chicago: Demand fair; trend steady; supply ample; $10.40@10.60 cwt., carlots.

Buffalo: Demand fair; trend steady; supply ample; spray $10.65 cwt.

Milwaukee: Demand and supply fair; $11 cwt.

Los Angeles: Demand slow; trend unchanged; supply ample; 14¢ lb. in less than ton lots; 13¾¢ lb. in ton lots.

Ogden: Supply normal; $15.15, 100-lb. drum.

San Francisco: Demand and supply fair; 13½¢ lb.

Boston: Demand and supply good; 12¢ lb.

New Orleans: Demand fair; trend unchanged; supply ample; $11.50@12 cwt.

Louisville: Demand slow; trend steady; supply normal; 11½@12¢ lb.

Philadelphia: Demand slow; supply light; $12.50 cwt.

Portland: Demand slow; supply ample; trend unchanged; 13¢ lb.

Cincinnati: Demand fair; trend steady; supply adequate; 10½¢ lb.

DRIED WHEY

Philadelphia: Demand slow; supply light; $6.50.

Chicago: Demand good; trend steady; supply fair; $5.50 cwt., carlots, f.o.b. plant.

Kansas City: Demand fair; trend steady; supply adequate; regular and partially delactosed $5.50 cwt., producers' plants.

Minneapolis: Trend steady; $6.50 cwt., delivered.

Ft. Worth: Demand fair; supply adequate; carlots, standard 48 sacked, delivered Ft. Worth; $6.25 ton lots, f.o.b. warehouse Ft. Worth.

Boston: Demand steady; supply fair; 5½¢ lb.

Louisville: Demand slow; trend steady; supply light; 6@6½¢ lb.

Portland: Demand slow; supply ample; trend unchanged; $7 cwt.

New Orleans: Demand good; supply ample; trend steady; $6@6.50 cwt.

Denver: Demand fair; trend steady; supply ample; $6.50 cwt.

San Francisco: Demand steady; supply good; $5.75 cwt.

Ogden: Supply average; $6.90, 100-lb. bag.

Los Angeles: Demand slow; trend unchanged; supply adequate; $6.10 cwt. in carloads; $6.35 cwt. in l.c.l.

Cincinnati: Demand fair; trend steady; supply adequate; $6.15 cwt.

Seattle: Demand and trend steady; supply good; $6.40 cwt., ex-warehouse, l.c.l.

FEATHER MEAL (HYDROLYZED)

Ft. Worth: Demand good; supply limited; 85% to 87% protein $98, f.o.b. trucks, north Texas plants.

Los Angeles: Demand fair; trend steady; supply adequate; $1 a unit of protein.

Boston: Demand good; supply nil; $85, nominal.

Salisbury, Md.: Demand good; supply limited; $98, f.o.b., bulk; sacked $4 more.

Atlanta: Demand and supply good; trend steady; $95.50, f.o.b. Georgia and Alabama producing mills.

FISH MEAL

Boston: Demand steady; supply good; $130.

Ft. Worth: Demand fair; supply sufficient; 60% menhaden $130, f.o.b. Gulf ports.

Ogden: Supply normal; $2.20 a unit, f.o.b. Coast; 65% $176@178.

San Francisco: Demand slow; supply ample; $2.07½ a unit of protein.

Minneapolis: Demand and supply fair; trend quiet; Gulf menhaden $148, delivered; 60% blended $130; 70% herring $2 a unit, West Coast.

Buffalo: Demand just fair; trend steady; supply ample; 60% protein menhaden $140 bulk, $145 sacked.

Chicago: Slight improvement in demand; trend higher to steady; supply fair; eastern menhaden $128@133 and scrap $124@129; Gulf menhaden $128@133 and scrap $124@129; eastern whitefish $130; herring meal $2@2.10 a unit of protein up to 73%; Northeast redfish $133.

Los Angeles: Demand limited; trend unchanged; light offerings; local production, 60% protein $2.22@2.25 a unit.

Milwaukee: Demand and supply fair; 60% $159.

Louisville: Demand slow; trend steady; supply light; $160, nominal.

Portland: Demand good; supply ample; trend unchanged; $2.10 a unit.

New Orleans: Demand fair; trend steady; supply normal; menhaden, 60% $128@130; scrap $123@126, f.o.b. Gulf.

Denver: Demand fair; trend steady; supply ample; $2.20 a unit of protein, f.o.b. West Coast.

Cincinnati: Demand fair; trend steady; supply adequate; $160.

Atlanta: Demand fair; trend steady; supply good; 60% menhaden $128, f.o.b. Atlantic and Gulf ports.

Seattle: Demand fair; trend easy; supply good; $2.50 a unit protein, ex-dock (new crop Alaska).

HAY

Los Angeles: Smaller offerings; slow demand; U.S. No. 1 $32@34; U.S. No. 2 leafy $30@31; U.S. No. 2 green $30@31; U.S. No. 2 $26@28.

Ogden: Supply normal; $1@1.25 bale; $20 ton in the field.

Ft. Worth: Demand fair for alfalfa, practically nil for prairie and Johnson grass; supply sufficient; carlots, baled, No. 1 alfalfa $36@38, No. 2 $34@36; No. 2 prairie $26@28; No. 2 Johnson grass $24@26, delivered Texas common points.

Denver: Demand fair; trend good; supply ample; alfalfa, baled $23@24 on new hay, first cutting.

Boston: Demand and supply seasonally steady; No. 2 timothy $40@42.

Wichita: Demand good; supply short; for prairie, sufficient for alfalfa; prairie $19, alfalfa $15@18.

Louisville: Demand very dull; trend weak; supply good; No. 1 local hay, any variety $23@25, No. 2 about $2 less; straw $18@20; new hay and straw now being baled; lower prices anticipated; new hay of better quality than in 1958 due to very dry weather.

Philadelphia: Demand slow; supply light; $25@26.

Portland: Demand good; supply ample; trend unchanged; $32.

Cincinnati: Demand poor; trend steady; supply adequate; No. 1 timothy $24; No. 1 second cutting green alfalfa $31; mixed $27; wheat or oat straw $19.

Seattle: Demand good; trend firm; supply fair; alfalfa, U.S. No. 2 green, new crop $32, delivered, truck lots.

HOMINY FEED

Buffalo: Demand fair; trend steady to lower; supply good; $48, bulk, Boston.

Kansas City: Demand fairly slow; trend steady; supply tight because of lack of production; yellow $41.50, bulk.

Chicago: Demand fair; trend slightly easier; supply adequate; $44, carlots.

Milwaukee: Demand good; supply fair; $42.50, sacked, Milwaukee.

New Orleans: Demand fair; trend steady; supply adequate; $51.40@52.

Louisville: Demand dull; supply light; trend stronger; $50, up $1.50.

Boston: Demand fair; supply ample; $52.50.

St. Louis: Demand slow; trend steady; supply adequate; $45.

Memphis: Demand poor; trend steady; supply ample; white $46, yellow $47.

Cincinnati: Demand fair; trend lower; supply adequate; $45.

Seattle: Demand fair; trend easy; supply good; $56, delivered, sacked, carlots.

LINSEED OIL MEAL

Chicago: Demand fair; trend easier; supply adequate; solvent $62.50, carlots, Minneapolis basis.

Kansas City: Demand slow; trend steady; no old process offered but solvent meal supply is adequate; solvent $62@62.50, bulk, Minneapolis; small amount of old process traded during week at between $69 and $70.

Minneapolis: Demand quiet; trend steady; supply ample; solvent, immediate $63, bulk, Minneapolis; last half of July $62.50.

Los Angeles: Demand fair; trend steady; supply tight; local production, 29% protein $71, bulk, July, August, September.

Philadelphia: Demand slow; trend unsettled; supply light; 34% $85.

Ft. Worth: Demand slow; supply sufficient; Texas production 34% old process $81.50, rail or truck.

Milwaukee: Demand good; supply fair; old process $81.50@85, nominal; new process $73.

Omaha: Demand good; trend strong; supply tight; 34% solvent $68.80, bulk, Omaha basis; 32% old process, not available.

Portland: Demand slow; supply ample; trend unchanged; $87.

New Orleans: Demand slow; supply ample; trend steady; $79.90@80.40.

Denver: Demand fair; trend steady; supply tight; $80.94, sacked, Denver.

Wichita: Demand good; supply sufficient; 34% $82.50.

Boston: Demand slow; supply light; 34% $84.

San Francisco: Demand fair; supply ample; $75.50.

Louisville: Old process, very little available, $90, up $5; new process $81.50, off $1.

Cincinnati: Demand poor; trend steady; supply adequate; new process $78; old process $89.

Seattle: Demand fair; trend firm; supply limited; 34% protein (Montana) $90, delivered carloads.

MALT SPROUTS

New Orleans: Demand fair; trend steady; supply ample; $42@44.

Boston: Demand and supply limited; $42.50.

Chicago: Demand quiet; trend steady; supply ample; No. 1, even weights $37.50 carlots; No. 1, uneven weights $34.50.

Milwaukee: Demand good; supply fair; odd weights $34.50; even weights $37.

Cincinnati: Demand fair; trend steady; supply adequate; No. 1 $42.

MEAT AND BONE MEAL

St. Paul: Demand fair; trend steady to strong; supply ample; $97@101.

Buffalo: Demand just fair; trend steady; supply ample; 50% meat scraps $90 bulk, $95 sacked.

Kansas City: Demand fair; trend steady; supply adequate for demand; 50% meat and bone $95@97.50, sacked.

Chicago: Demand fair; trend steady; supply adequate; 50% protein $95, carlots.

Ft. Worth: Demand light; supply sufficient; meat and bone, 50% $88.50@89.50, f.o.b. or delivered Ft. Worth.

Ogden: Supply normal; scraps $97.50 in 100-lb. bags.

Omaha: Demand good; trend strong; supply ample; $100.

San Francisco: Demand fair; supply ample; $1.85 a unit of protein, bulk.

Louisville: Demand dull; trend steady; supply good; $85@90.

Portland: Demand slow; trend lower; supply ample; $1.80 a unit.

Boston: Demand good; supply adequate; $1.40 a protein unit; converted, 50% $82.50.

New York: Demand and supply good; trend steady; 50% $80, 55% $87.50 bulk; 50% $82.50, 55% $90 sacked.

Wichita: Demand good; supply sufficient; 50% $95, f.o.b. plant; 55%, no quotations, no offerings.

Denver: Demand good; trend steady; supply ample; 50% $85, bagged, truck lots; $82 bulk lots.

New Orleans: Demand easy; supply ample; trend steady; $90@93.

St. Louis: Demand good; trend steady; supply ample; $96.

Los Angeles: Demand slow; trend unchanged; supply adequate; 50% protein $1.85 a unit, bulk.

Cincinnati: Demand good; trend strong; supply fair; 50% meat and bone scraps $92.50, Cincinnati.

Seattle: Demand good; trend steady;

FEED INGREDIENTS
Fish Meal • Scrap • Solubles
Bigelow Sales Company
10 Bridge St. NEW YORK 4, N.Y.
Tel. HAnover 2-9195

For DEHYDRATED ALFALFA—
"MERRY MIXER"
GREENULES*
BETTER DISPERSION!
DUST-FREE! FREER FLOWING!
MORE UNIFORM!
CONSOLIDATED BLENDERS INC.
Fremont, Nebr. • Phone Park 1-7080
*TRADE MARK

FEED GRAINS
KAFIR-MILO
BARLEY - CORN - OATS - WHEAT
From Every Grain Producing Area in United States
CONTINENTAL GRAIN COMPANY

OFFICES:
New York, Chicago, Kansas City, St. Louis, Omaha, Columbus, Memphis, Norfolk, Nashville, Enid, Minneapolis, Louisville, Fort Worth, Buffalo, Toledo, Houston, Galveston, Portland, San Francisco, Vancouver, B.C., Winnipeg, Los Angeles

TERMINAL ELEVATORS:
Kansas City, St. Louis, Chicago, Buffalo, Omaha, Toledo, Columbus, Fort Worth, Portland, Boston, Galveston, Enid, Minneapolis, Norfolk, San Francisco, Nashville, Louisville, Memphis, Houston

supply ample; 50% protein scraps $97.50, ex-warehouse.

MILLFEED

Minneapolis: Demand fair; stronger undertone; supply tight; middlings $36, bran $32.

Kansas City: Demand slow to moderate with middlings' demand said to be improved; trend steady; supply ample; bran $23.25@23, shorts $34@34.75, sacked; bran $24@24.75, shorts $31.50@32.25, middlings $28@28.75, bulk.

Wichita: Demand poor; supply ample; basis Kansas City: bran $28.25@28.75, shorts $35.75@36.25; bran declined $1.25 and shorts $2.25, compared with the preceding week.

Ft. Worth: Demand fair; supply sufficient; carlots, burlaps, bran $36, gray shorts $43, bulk middlings $36.50, delivered Texas common points; $1 lower on bran, $2.50 lower on shorts and $2 lower on middlings compared with previous week.

Chicago: For the week ending July 8, the millfeed market had something in common with the two previous weeks in that red dog continued to roll-up strength, advancing another $2 ton. The surprising thing about it is that the demand for this feed seems to be just about as good as it was when the price was substantially lower, with the sacked red dog getting a better play than the bulk. Offerings of this commodity have been comparatively skimpy and this lack of selling pressure has had about as much to do with keeping prices on the uptrend as has the breadth of the demand. Most of current demand for all millfeeds is for comparatively nearby shipment and very little apparently is wanted for farther ahead than next week. And surprisingly enough, mills are not pressing stuff for deferred shipment. Quotations: standard bran, sacked $37@37.50 and bulk $32, nominal; standard midds., sacked $39.50@40 and bulk $34.50; red dog, sacked $52.50 and bulk $48.50, nominal.

St. Louis: Bran $33.75@34.25, shorts $39.50@40, sacked; bran $29@29.50, shorts $36.50@37, middlings $33@33.50, bulk.

Boston: Demand spotty; supply irregular; bran $46, middlings $50.

Buffalo: Millfeed sales continued quiet last week. Medium and large mixers have no incentive to go heavy on bran and middlings because of the cheapness of comparative ingredients. The sacked differential narrowed from $5.50@4.50 as country trade lagged. Bulk bran ended unchanged and sacked was off $1; bulk middlings were unchanged to off 50¢ and sacked was down $1@1.50; bulk red dog was unchanged and sacked was up $1. Quotations July 8: bulk bran $31.50@32, sacked $36@36.50; bulk middlings $37@37.50, sacked $41.50@42; bulk red dog $48@50.50, sacked $52.50@53.50.

New York: Demand fair; trend steady; supply good; bran $44.50@45, standard midds. $50@55.

Philadelphia: Demand dull; supply fair; bran $45.50, standard midds. $48.50, red dog $58.

Cincinnati: Demand poor; trend lower; supply adequate; bran $39.50; middlings $45.50.

New Orleans: Demand fair; trend steady; supply normal; sacked, bran $41.50@42.55, shorts $51.25@52; bulk, bran $37.50@38.25, shorts $46.50@47.25.

Louisville: Demand slow; trend weak; supply good; bran $39.60, mixed feed $43.85, shorts $48.60, middlings $47.30.

Memphis: Demand fair; trend weak; supply ample to plentiful; wheat bran $36.30, sacked; gray shorts $42.80, sacked; standard midds. $35.70, bulk.

Omaha: Demand fair; trend steady; supply ample; sacked bran $29; sacked gray shorts $35.50; bulk standard midds. $30, all Omaha basis.

Denver: Demand fair; trend easy; supply ample; shorts $38, bran $31.50, mill run $34.75.

Seattle: Demand fair; trend steady; supply ample; $40, delivered, common transit points, carlots.

Portland: Demand good; supply ample; trend unchanged; $37.

Ogden: Supply average; to Utah and Idaho: red bran and mill run $39, middlings $44; to Denver: red bran and mill run $46, middlings $51; to California: red bran and mill run $46.50, middlings $51.50, f.o.b. San Francisco and Los Angeles.

San Francisco: Demand good; supply tight; millfeed $46.50; red bran $48.

Los Angeles: Standard mill run $42@42.50, bulk, moderate demand, steady trend, adequate supplies; red bran $42 bulk, better demand, easier trend, adequate supplies.

MILLFEED • FEED GRAIN
FEED INGREDIENTS
What Do You Need?
—Jerry Parks
633 Board of Trade
KANSAS CITY, MISSOURI

COB FEED BASE
HARD WOODY PARTICLES REMOVED
TI-CO INDUSTRIES, INC.
P. O. Box 185 Tipton, Indiana
Phone or Telegraph:
Federal 2-5942, Elwood, Indiana

MANEY BROS.
MILL & ELEV. CO.
Minneapolis, Minnesota
Distributors in the Upper Midwest States for
SMALL'S DEHYDRATED ALFALFA MEAL

SMALL'S
DEHYDRATED ALFALFA
"For Feeds with a Future"
Archer-Daniels-Midland Co.
Alfalfa Division
P. O. Box 386 • Kansas City, Mo.

MINERAL FEED

Ogden: Supply average; $113 in 50-lb. blocks; $103, granular, 50-lb. bags.

Ft. Worth: Demand fair; supply sufficient; all-purpose granules $90, block $97; mineral phosphorus 6% granules $106, block $113; cattle-sheep mineral 7% phosphorus granules $100, block $107; hog mineral phosphorus 3½% granules $87, phosphorus 2% $77 (all in 50-lb. paper bags).

Denver: Demand fair; trend steady; supply ample; $155.

Wichita: Demand fair; supply ample; all-purpose with iodine, 50-lb. blocks $97.50, 100-lb. bags $92.50, f.o.b. plant.

San Francisco: Demand steady; supply good; all-purpose with iodine $70.

Portland: Demand slow; supply ample; trend unchanged; $45.

Sioux City: 50-lb. mineral blocks 8.2% phosphorus $92; 7.5% phenothiazine sheep mineral blocks $4 each.

Seattle: Demand fair; trend steady; supply good; mixer mineral $45, ex-warehouse; all-purpose mineral $85, ex-warehouse.

MOLASSES

Ft. Worth: Demand fair; supply sufficient; blackstrap 12½¢ gal., f.o.b. Houston; delivered Ft. Worth, truck $28.07 ton, seller's market price on date of shipment.

Minneapolis: Demand fair; trend steady; supply ample; blackstrap $33.50, tank trucks, delivered.

Buffalo: Demand and supply good; trend steady; 16½¢ gal., f.o.b. Albany.

Kansas City: Demand slow; trend steady to weaker; supply ample; 11⅛@11¾¢ gal., tank car, New Orleans.

New York: Demand fair; trend steady; supply good; blackstrap 16¢ gal., tank cars, tank wagons, f.o.b. New York.

Los Angeles: Demand steady; trend unchanged; supply adequate; $21.50, bulk, f.o.b. tank cars; $21.75, bulk, f.o.b. tank trucks.

New Orleans: Demand good; supply ample; trend steady; 12¢ gal., tank cars and trucks; 600-lb. customers' drums $8.33.

Boston: Demand steady; supply plentiful; 16½¢ gal. in tank cars.

Memphis: Demand poor; trend weak; supply ample; blackstrap 11⅛@11¾¢ gal., tank car, f.o.b. New Orleans, and $28.50 ton, delivered Memphis, truck.

St. Louis: Demand slow; trend steady; supply ample; 11¾¢ gal., New Orleans.

Denver: Demand fair; trend steady; supply ample; 11¢ gal., New Orleans; $20.09 ton, New Orleans; $21.50 ton, f.o.b. West Coast.

Milwaukee: Demand and supply fair; blackstrap 11¾¢ gal., f.o.b. New Orleans.

San Francisco: Demand and supply good; $21.50, f.o.b. cars, Richmond, Cal.

Louisville: Demand slow; trend steady; supply normal; 11¾¢ gal., tank car lots, f.o.b. Gulf ports.

Cincinnati: Demand fair; trend lower; supply adequate; 11¾¢ gal., New Orleans.

Atlanta: Demand fair; trend steady; supply good; citrus $19@22.50, bulk, f.o.b. Florida producing mills.

Seattle: Demand fair; trend easy; supply good; $21.50, f.o.b. Seattle, tank car lots or truck lots.

NIACIN

New York: Trend steady; 1¢ kilo, 10-kilo lots; $6.20 kilo, 5- and 2½-kilo lots; $6.30 kilo, 1-kilo lots; freight prepaid or paid to destination.

OAT PRODUCTS

Seattle: Demand and supply fair; trend firm; $55, bulk, delivered, truck lots.

Los Angeles: Demand fair; trend weaker; supply adequate; pulverized, local production $61, sacked.

Portland: Demand good; supply ample; trend unchanged; rolled $66; ground $63; cleaned $65.

Minneapolis: Trend steady; reground oat feed $23; feeding rolled oats $82; feeding oatmeal $70.50; pulverized $46.50; crimped $61.

Chicago: Demand better; trend upward; supply moderate; reground oat feed, carlots $22, nominal; fine ground feeding oatmeal $69.50@72; feeding rolled oats $79.50@80.

Boston: Demand and supply steady; white pulverized $57; reground oat feed $28.50.

Ft. Worth: Demand slow; supply sufficient; oat millfeed $46.20; reground $31.20.

Philadelphia: Pulverized white demand slow, supply fair $53; domestic oat feed demand slow, supply light $32.50; Canadian oat feed demand dull, trend unsettled, supply very light, no quotation.

Memphis: Demand fair; trend steady to higher; supply light; 3½% protein, reground oat feed $28.25.

Louisville: Demand dull; trend stronger; supply normal; reground $29.30, up $1; rolled $85.30, up $1; feeding $78.30, up $1; pulverized $52.30, unchanged; crimped $70.30, up $1.

Cincinnati: Demand poor; trend steady; supply adequate; reground oats $28; pulverized white oats $51; rolled oats $51.

OYSTER SHELL

Seattle: Demand and trend steady; supply good; eastern $36, delivered, carlots.

San Francisco: Demand fair; supply ample; local $15, eastern $26.

Los Angeles: Demand slow; trend unchanged; supply ample; $14.80, sacked.

New Orleans: Demand and supply good; trend steady; $24.50@25.

Boston: Demand slow; supply adequate; $26.02 in paper.

Louisville: Demand and supply good; trend steady; in 50-lb. paper $23.45; in 50-lb. paper $23.70; in 25-lb. paper $25.95.

Portland: Demand good; supply ample; trend unchanged; western $34, eastern $39, granite grits $28, shell flour $24.

Cincinnati: Demand fair; trend steady; supply adequate; $24.45.

PEANUT OIL MEAL

Atlanta: Demand poor; trend weak; supply fair; 45% $58, f.o.b. Alabama producing mills.

Milwaukee: Demand and supply fair; 26% $42.

PEAT MOSS

Philadelphia: Demand and supply fair; trend unsettled; $2.90 bale, f.o.b. pier.

Chicago: Demand fair; trend slightly easier; supply ample; standard 7⅛ cu. ft. bales $3.80.

Los Angeles: Demand slow; trend unchanged; supply adequate; Canadian, 6.1 cu. ft. bales $3.75.

Boston: Demand and supply steady; $3.15 bale, in carlots.

Portland: Demand slow; supply ample; trend unchanged; $3 bale.

Seattle: Demand and supply good; trend firm; $2.80 bale, delivered truck lots.

POTASSIUM IODIDE, U.S.P.

Chittenango, N.Y.: Demand good; supply adequate; 90% KI stabilized with calcium stearate, 200 lb. in 100-lb. cartons $1.30; 100-lb. cartons $1.32; 25-lb. cartons $1.45; freight paid to destination.

Cincinnati: Demand good; trend steady; 90% KI in calcium stearate or carbonate mixtures: 250-lb. drums $1.35; 200 lb. in 100-lb. drums $1.35; 100-lb. drums $1.38; 25-lb. drums $1.41, f.o.b. Cincinnati.

POULTRY BY-PRODUCTS

Ft. Worth: Demand good; supply limited; 55% protein $98, f.o.b. north Texas plants.

Los Angeles: Demand fair, trend steady; supply adequate; $1.65 a unit of protein.

Boston: Demand steady; supply tight; $95.50.

Atlanta: Demand good; trend steady; supply good; meal $87, f.o.b. Georgia and Alabama producing mills.

Salisbury, Md.: Demand good; supply limited; $93, f.o.b. bulk, sacked $4 more.

RIBOFLAVIN

New York: Trend steady; feed grade (in feed supplements) 4½¢ gm. in 3.36 to 16 gm./lb. mixtures, freight prepaid or paid to destination.

Cincinnati: Trend steady; feed grade (in feed supplements) 4¢ gm. in less than ton lots, in 3.36 to 16 gm./lb. mixtures; 3¢ in ton lots or more, freight prepaid or paid to destination.

RICE BY-PRODUCTS

Ft. Worth: Demand slow; offerings light; carlots, rice bran $33@34, f.o.b. south Texas rice mills; hulls $6.50, f.o.b. mills.

Los Angeles: Demand slow; trend unchanged; supply adequate; bran, California production, high fat content $51, sacked.

San Francisco: Demand good; supply ample; bran $45; polished $49.

Atlanta: Demand fair; trend steady; supply good; bran $41@42, delivered.

SCREENINGS

Minneapolis: Very little trading, domestic screenings practically nonexistent; Canadian $15.50, nominal, Duluth; Canadian ground $25, lights $4@14, mediums $15@24, heavies $26@34.

Buffalo: Demand fair; trend higher; supply fair to poor; ground, sacked $29.50, New York, lake and rail; unground, bulk $24.50.

Chicago: Demand fair; trend steady; supply ample; ground grain screenings, carlots $27.50; Canadian, carlots $18.50.

Ft. Worth: Demand nil; supply light; ground grain $30@32.

Cincinnati: Demand fair; trend steady; supply adequate; ground grain screenings $34.

SOFT PHOSPHATE WITH COLLOIDAL CLAY

Atlanta: $20.40@20.67.
Buffalo: $25.31@25.45.
Chicago: $24.77@24.90.
Cincinnati: $23.47@23.60.
Des Moines: $25.23@25.35.
Kansas City: $24.88@25.
Memphis: $22.20@22.47.
Minneapolis: $25.92@26.06.
Philadelphia: $24.32@24.95.
St. Louis: $24.14@24.27.

SORGHUMS

Ft. Worth: Demand fair; supply increasing; new crop milo beginning to move in south Texas; carlots, bulk, No. 2 yellow milo $2.24@2.26, delivered Texas common points.

Los Angeles: Demand good for nearby only; trend weaker; supply tight for nearby; milo $2.37½ cwt., bulk.

SOYBEAN OIL MEAL

Milwaukee: Demand good; supply fair; $59.50, bulk, Decatur.

Ogden: Supply normal; $84@89.

Ft. Worth: Demand good; supply sufficient; carlots, southern origin, 44%: July-August $73.50, 50% protein, July-September $84@85; truck, 44% $73@73.50.

St. Louis: Demand slow; trend steady; supply ample; 44% $67.

Wichita: Demand good; supply ample; 44% $69, 50% $77, f.o.b. Wichita.

Minneapolis: Demand good; trend steady; bullish situation toned down a bit with better supply; $53.50@54, bulk, Decatur, for shipment to Minneapolis.

Atlanta: Demand poor; trend weak; supply good; 44% $72, delivered.

Seattle: Demand fair; trend firm; supply ample; $87, delivered, carlots.

Kansas City: Demand slow in this area; trend steady for nearby, stronger for forward; supply ample; 44% protein for Kansas City shipment $56@56.50, bulk, Decatur; unrestricted $58@59.

Chicago: After having shown much strength during preceding weekly periods, soybean oil meal prices began to give evidence of leveling off in the week ending July 8. Whether this means the trend is to be a consolidation of the recent advances ahead of still further price upswings and the actual end of the run-up, remains to be seen. Offerings for nearby shipment remain relatively small, and this, coupled with the steady demand for small sized individual lots, seems to have maintained a healthy price situation. Pricewise, the unrestricted billing meal has shown some further upturns this week, but, on the other hand, eastern restricted has been inclined to lose just a little ground. In the meal futures market, the maturing July is down from July 1, but actually, on July 6 it hit a brand new high mark for the season at $59.80 ton. Quotations: 44% protein, Decatur basis, carlots: unrestricted $59.50@60 and eastern restricted $57; 50% protein, unrestricted $63@63.50 and eastern restricted $65.

New Orleans: Demand slow; supply ample; trend steady; $67@68.

Portland: Demand fair; trend higher; supply ample; $54.50, f.o.b. Decatur.

Denver: Demand good; trend firmer; supply fair; $74.64, sacked, Denver.

Omaha: Demand fair; trend easy; supply ample; 44% $62.90, bulk, delivered, Omaha.

Memphis: Demand slow; trend lower; supply plentiful; prime 44% solvent $66, sacked, f.o.b. Memphis.

San Francisco: Demand good; supply ample; $55.40.

Los Angeles: Demand fair; trend firmer; smaller offerings; $30.90@31.40, bulk.

Boston: Demand fair; supply adequate; 44% $57.50; 50% $65.50, both f.o.b. bulk, Decatur.

Louisville: Demand slow; trend steady; supply normal; $70.20.

Philadelphia: Demand and supply fair; trend unsettled; 44% $57.50, bulk, Decatur.

Cincinnati: Demand poor; trend higher; supply adequate; $60, bulk, Decatur.

TANKAGE

New Orleans: Demand good; supply light; trend steady; $97@99.

Wichita: Demand good; supply sufficient; 60% $90, f.o.b. plant.

Omaha: Demand good; trend strong; supply ample; $100.

St. Paul: Demand fair; trend steady; supply ample; $90@94.

Chicago: Demand good; trend steady; supply ample; 60% protein, carlots, in 100-lb. bags $95.

Kansas City: Demand slow to moderate; trend steady; supply enlarging each week as hog kills increase; 60% digester $87.50@90, sacked.

Ft. Worth: Demand slow; supply light; 60% digester $90, Ft. Worth.

St. Louis: Demand fair; trend steady; supply ample; $93.

Louisville: Demand slow; trend steady; supply normal to heavy; 60% $85@90.

Cincinnati: Demand good; trend strong; supply ample; 60% digester $90, Cincinnati.

VEGETABLE AND ANIMAL FAT (HYDROLYZED)

Ft. Worth: Demand excellent; limited offerings for July; 6½¢ lb., f.o.b. north Texas area.

VITAMIN E FEED SUPPLEMENT

Cincinnati: Demand good; trend steady; any quantity in 100-lb. drums $1.50; in 25-lb. drums $1.55; freight allowed to destination.

New York: Demand and supply good; trend steady; 100-lb. drums $1.50 lb., 25-lb. drums $1.55 lb., f.o.b. manufacturing plants, freight allowed and goods insured to destination.

Rochester, N.Y.: Demand and supply good; trend steady; 100-lb. drums $1.50 lb., 25-lb. drums $1.55 lb., f.o.b. manufacturing plants, freight allowed and goods insured to destination.

WHEAT GERM MEAL

Buffalo: Demand poor; trend steady to lower; supply adequate; commercial grade $53, sacked, f.o.b. Buffalo.

New Orleans: Demand fair; trend steady; supply fair; $68@70.

AFMA

(Continued from page 1)

group is working with additive suppliers and their organization.

Mr. Mintener, who now practices law in Washington, was formerly counsel for the Pillsbury Co. and subsequently was assistant secretary of health, education and welfare—the department which includes FDA.

As noted in a bulletin this week, the AFMA board held an emergency meeting last week and drafted a set of conclusions and recommendations on the problem.

Also present for the meeting were representatives of the Animal Health Institute who had just completed conferences with FDA officials in Washington, presenting scientific data to FDA officials on the safety of additives in question.

"Dal Bruner, secretary of AHI, and his group, together with individual members, are working diligently to help solve the present dilemma," AFMA said. "He feels a solution might be more realistically achieved by approaching the problem involving arsenic compounds and estrogens separately since the carcinogenic aspects are not the same. The Washington conference was limited to a discussion of the safety of arsenic-containing compounds."

A report on conclusions reached at the AHI-FDA conference was sent to AHI members and AFMA members. (See accompanying story.)

AFMA officials hope that ways will be found soon to ease the situation; in the meantime they reiterate their concern with the "inequities" for feed manufacturers which have resulted from FDA's "freeze" order under certain circumstances, on uses of estrogens and arsenicals and formulation changes.

The situation is affecting not only the products in question but also is resulting in many cases in restrictions which prevent other changes in feeds, including uses of other new additives.

AFMA Conclusions

Following are the conclusions and recommendations of the AFMA board of directors.

1. It is evident the problem has both short and long range aspects.

2. The immediate problem involves a program in which all manufacturers would have equal opportunity to

use the ingredients in question until such time as the current problem is resolved.

Vigorous effort should be exerted to assure, as quickly as possible, that a solution will bring equality to feed manufacturers without revocation of applications currently in effect.

3. AFMA believes the adoption of an "interim policy" would allow FDA to fully exercise its responsibility in protecting the public health.

It is recognized, even by FDA, that the products in question are safe under conditions of intended use.

Adoption of an interim policy would allow FDA to make a fair evaluation of the scientific data, to clarify legal aspects, or to allow for possible solution through subsequent congressional action.

4. The long range problem involves the attitude and policy toward new feed additives, and/or other additives now in use, and consideration of an educational campaign to properly bring the facts before consumers, educators, legislators and others.

5. Due to the extreme complexity of the entire situation, the AFMA board chairman and the AFMA president were authorized to arrange for the services of a highly qualified lawyer who has knowledge of the feed industry and fully understands the administrative and legal procedures of the Food and Drug Administration.

Advice and counsel from such a source is believed necessary in charting a course that will enable AFMA to be as effective as possible in coping with this problem.

6. The many extenuating circumstances contributing to the current situation signal the importance of exercising considered judgment before taking any action that may further complicate an already confused state of affairs.

CAPITAL COMMENT

(Continued from page 1)

under the legislative and legal problems involved.

As pointed out before, the FDA policy statement was in nature a broad generalization of how it interpreted its rulings on feed additives under the Delaney amendment.

While the statement did not specifically mention estrogens or arsenicals—and, incidentally, the FDA, in first disclosing these two groups, failed to segregate some arsenical groups from others—as the chemicals affected, it was obvious that these were the objectives at which the FDA policy statement was pointed. (Also see accompanying stories.)

It may also be noted that FDA took its position reluctantly since the agency had, prior to enactment of the Delaney amendment, given approval to use of these drugs in the feed industry. It was provided that previous use clearances would stand, notwithstanding the arbitrary language of the Delaney amendment regarding use of substances said to have carcinogenic results in test animals. The result under the FDA interpretation was that, at least under certain circumstances, new uses of some of these substances could not be cleared.

The American Feed Manufacturers Assn. appeared before FDA officials to declare that such a ruling was discriminatory among feed companies which did not have previous clearances on such materials. In addition it was noted that under certain circumstances feed formulas were in effect frozen.

Economic Effects

Although certain components of a feed affected by the FDA ruling presumably can be changed, if other alterations are not made, it appears possible that there could be limitations in changing protein and carbohydrate sources even though market situations might demand such business judgment. Thus, there could be an important economic impact through possible limitations on pricing judgment between commodities.

However, noting all of the various restrictions on feed industry practices and restraints imposed on the drug industries, it is now understood that all of these groups will first try to resolve their problems through consultation with FDA.

This reporter has been advised that many chemical companies have now engaged legal representation here in connection with the Food and Drug problems. And the American Feed Manufacturers Assn. has joined in this concentrated defense. At the same time, the feed industry problem, while involved with problems of the chemical industry, appears to be one apart from the basic problems of the chemical industry.

It looked for a time as though there would be action from some sources aimed at Congress and the courts.

However, it now appears that the total position of the feed industry and the chemical industry suppliers is one of consultation aimed at some area of agreement.

Meanwhile, one chemical industry source said that the industry as a whole is taking a sideline position waiting to see the next move by FDA. While agreement is hoped for, solutions are not easy.

As for congressional action, it was learned from authoritative sources that even if Congress might offer an amendment to the Delaney amendment at this session, it is doubted that the secretary of health, education and welfare could give his approval to such a modification. This is because it is now known that the National Institutes of Health probably would not give unanimous consent to general use of questioned materials as additives in food, meaning inclusion of such compounds in feeds even if there were no residuals in the end meat products.

Meanwhile, it appears fortunate that all of the industries involved—following the lead of the AFMA—have mellowed to a path of consultation and a moderate approach to what is nothing less than a very severe problem with possible vast economic effects and serious results on feeding progress. If the current FDA policy were to remain in effect, it is clear, there could be real handicaps on progress in producing livestock and poultry meat efficiently and economically.

In connection with the FDA policy statement, it is noted that there is a stimulated demand for topflight food and drug attorneys to represent affected interests here, including chemical and drug firms.

The AFMA has engaged as advisory counsel one of the top men in food and drug law, Bradshaw Mintener, former counsel for the Pillsbury Co. and subsequently assistant secretary of health, education and welfare. It is understood that Mr. Mintener will act as general policy advisor to the AFMA and that he will not supersede house counsel of any of the industry companies.

The FDA law practitioners are expected to assemble here this coming week to assess the current situation and make their plans on the basis of agreed policy.

It appears to this reporter that the previously suggested policy of caution and consultation, with possible summit sessions with FDA, will prevail, and that there is not now reason for panic or the building of home bomb shelters.

It is evident that FDA officials are in a problem just as hot as it is for the feed or chemical industries, and there does not seem reason now to begin to add fuel to the burning.

GRAIN MAN DIES

MILWAUKEE—J. Howard Mallon, Sr., 69, former purchasing agent for the Charles A. Krause Milling Co., died recently after suffering a stroke at his home.

PRICE RATIOS

(Continued from page 8)

slightly during the month as lower feeder livestock and feed prices more than offset higher prices for farm machinery.

USDA said the index of prices received by farmers for meat animals declined 3% from May to June after a three-month rise. This left the index at 329% of its 1910-14 average, which was 5% below June, 1958.

The poultry and egg index continued the decline that had been underway since January and at mid-June, before prices began moving upward, the index averaged 124, nearly 2% below a month earlier and 27% below June, 1958.

Prices paid by farmers for feed averaged slightly more than 1% lower at mid-June than a month earlier, with most feed items down except oats and shelled corn. The feed index, at 199, was about 1% below a year earlier, and the lowest for the month since 1946.

DRUG GROUP

(Continued from page 1)

position and on the conclusions reached during the conference with FDA on arsenicals:

"The position of the Animal Health Institute is that the Food Additives Amendment, as reported out of committee to Congress, was a good law which would have benefited and properly protected the people of the nation—that the law was designed to place judgment in these matters on a scientific basis, such conditions being readily enforceable—and, that the Delaney clause imposes an impossible situation upon both government and industry by removing the food additives amendment from the realm of scientific judgment and placing it in the realm of conjecture.

"The problems of diethylstilbestrol being separate and distinct, it was generally agreed the major portion of the AHI-FDA conference should be devoted to arsenicals.

Conclusions Reached During AHI-FDA Conference

"1. It was generally agreed there is no evidence that organic arsenicals induce cancer in man or animal and that their prohibition as food additives under the present conditions of intended use results from guilt by association rather than justification from a scientific standpoint. There appears to be no knowledge as to what constitutes an appropriate test of organic arsenicals for induction of cancer in man or animal.

"2. The law specifically provides that no additive shall be deemed safe if it is 'found' to induce cancer, that the required finding must be made by the secretary and then only upon the basis of a 'fair evaluation of the data.' Therefore, there can be no burden upon industry to conduct tests to prove the absence of carcinogenicity.

"3. There was general agreement there is no evidence that cancer has been caused by drugs presently in use in the manner in which they are intended to be used.

"4. It was generally agreed that industry will undertake pharmacological and toxicological studies to further establish the safety of organic arsenicals under conditions of their intended use in animal feeds.

"5. It was generally agreed that a list of qualified experts (cancer researchers) should be established—that these experts should be provided with complete data on the history and use of each presently used organic arsenical—and that these qualified experts be invited to answer the question, 'Are these organic arsenicals, individually, considered by qualified experts to be safe under conditions of their intended use?'

"6. It was generally agreed that if organic arsenicals in present use are considered by qualified experts to be generally recognized as safe under conditions of intended use, they would then be exempt from the Food Additives Amendment and any persons now holding effective new drug applications could use these arsenicals in animal feeds without hindrance. This would not, however, be the case with respect to new products or new claims for existing products.

"Many other problems of concern to drug manufacturers in the animal field were not covered in the conference with the commissioner because of lack of time; however, they were again discussed with various members of the department and are high on AHI's agenda to receive attention."

RED FOLEY

(Continued from page 8)

used to promote broilers and turkeys.

Dr. Andrews indicated that the theme can be used freely by other firms and industry groups in their advertising and promotion in the belief that concerted action and repetition of the phrase "Enjoy the Golden Goodness of Eggs" will have a beneficial effect on egg sales.

Red Foley and members of his troupe will attend the APHF convention in person to participate in introductory activity at Kiel Auditorium and around St. Louis. He is slated to be interviewed by the NBC radio network and to make an appearance on NBC television. He is also scheduled for local radio and television appearances, and will be on the program for the APHF stag breakfast.

Convention registrants will have an opportunity to see and meet Mr. Foley at the Hess & Clark exhibit July 22, where autographed photographs will be handed out. Visitors who register at the exhibit also will be eligible for prizes.

Hess & Clark also said it plans to "bury" St. Louis under a mound of hard-boiled eggs during the three-day session, with the cooperation of General Mills, Inc., and Morton Salt Co. An estimated 50,000 Sure Fresh Eggs are being hard-boiled for distribution in St. Louis in connection with the convention. Also, special baskets of eggs will be presented by the square dancers on the Red Foley Show to the mayor and others.

The eggs will be individually packaged in a glassine bag along with a small shaker of Morton Salt and a special folder on the proper boiling of an egg and 21 ways to use hard-boiled eggs.

Hess & Clark is also supplying several thousand place mats encouraging diners to "Enjoy the Golden Goodness of Eggs" for use in hotel coffee shops and restaurants during the convention.

W. R. Grace Company Promotes Robert Parks

NEW YORK—Dr. Robert Q. Parks has been promoted to general manager of Grace chemical division, W. R. Grace & Co., William J. Haude, division president, announced. Frank J. Ronan succeeds Dr. Parks as general sales manager.

Dr. Parks joined Grace in 1953 as manager of agricultural services. He has served as general sales manager since his appointment to that position in 1955.

Before his association with Grace, Dr. Parks was director of the division of soil management and irrigation for the U.S. Department of Agriculture. Earlier he was connected with the Ohio Agricultural Experiment Station, and the U.S. Plant, Soil and Nutrition Laboratory.

Dr. Parks holds B.S. and M.S. degrees in agricultural chemistry from the University of Arizona, and a Ph.D. in agronomy from Ohio State University.

Mr. Ronan was formerly midwestern district sales manager for Grace chemical division with offices in Chicago.

Chicks Placed in Principal Broiler Areas

(000's omitted)

Week ending	Maine	Conn.	Penn.	Ind.	Ill.	Mo.	Del.	Md.
May 2	1,234	666	840	843	181	843	1,986	1,711
May 9	1,240	601	736	873	102	702	1,996	1,649
May 16	1,232	566	855	775	138	782	1,908	1,637
May 23	1,240	533	888	885	94	756	1,672	1,884
May 30	1,267	633	786	759	135	670	1,753	1,832
June 6	1,275	482	844	872	123	733	1,699	1,832
June 13	1,310	590	913	810	100	742	1,755	1,905
June 20	1,228	635	677	831	110	839	1,742	1,869
June 27	1,263	568	735	862	136	799	1,694	1,963
July 4	1,186	620	814	778	99	818	1,722	2,001

Week ending	Va.	W. Va.	N.C.	S.C.	Ga.	Fla.	Ala.	Miss.
May 2	1,220	601	3,213	326	7,244	222	3,802	2,531
May 9	1,197	633	3,300	320	6,996	205	3,506	2,267
May 16	1,241	737	3,128	336	7,165	196	3,493	2,416
May 23	1,251	585	2,933	337	7,053	211	3,446	2,498
May 30	1,223	723	2,998	365	6,951	188	3,404	2,465
June 6	1,243	575	3,016	351	7,002	178	3,413	2,485
June 13	1,168	658	3,037	338	6,961	223	3,461	2,533
June 20	1,322	533	3,019	339	6,807	231	3,470	2,439
June 27	1,124	529	2,926	357	6,922	206	3,461	2,256
July 4	1,066	521	2,981	327	6,776	225	3,406	2,464

Week ending	Ark.	La.	Texas	Wash.	Oregon	Calif.	Total 22 areas 1959	1958
May 2	3,465	500	2,518	375	258	1,054	35,633	33,930
May 9	3,527	473	2,196	369	205	1,055	34,148	34,910
May 16	3,479	396	2,080	343	244	1,091	34,238	35,504
May 23	3,428	394	2,097	399	244	995	33,828	36,390
May 30	3,501	423	2,200	371	227	987	33,892	36,532
June 6	3,551	400	2,312	377	268	1,033	34,087	36,562
June 13	3,566	448	2,306	374	276	978	34,359	36,900
June 20	3,398	468	2,299	384	247	1,103	33,990	36,889
June 27	3,231	487	2,367	341	262	1,108	33,597	36,237
July 4	3,580	449	2,250	332	243	1,015	33,673	35,436

OHIO

(Continued from page 6)

plified early creep feed from the 14th to the 35th day. The palatability of certain ration ingredients was measured by their substitution for corn and rolled oats in the basal feed.

Considerable variation in the consumption of creep feed during the three-week period was noted, with as little as 0.8 lb. of the basal feed eaten to as much as 7.86 lb. where 4% dried fish solubles were substituted. Only 4% dried fish solubles and 10% lard appeared to increase the palatability of the basal feed in all trials. Pigs also consumed more of the feed containing 1% ground limestone and 1% steamed bone meal in the three seasons where this substitution was made. Ingredients which showed a more variable influence on palatability included dried skim milk, dried molasses, corn sugar and saccharin. One season's results indicated that Sucaryl was palatable to pigs of this age and that cooking or expanding the basal feed increased its acceptability. The greatest overall influence on consumption appeared to be related to weather conditions, warm dry weather being conducive to creep feed consumption and cool wet weather decreasing the amount eaten.

Measurement of, and Ways of Affecting Sex - Influenced - Performance of Growing-Finishing Swine: From detailed carcass measurement obtained on littermate boars, barrows and gilts slaughtered at 100, 150 and 210 lb. liveweight, it appeared the differences in leanness evident at slaughter weight largely develop after a weight of 150 lb.; the boars developing the leanest carcass followed by the gilts and barrows in that order.

Implantation of 1½, 3 or 6 mg. of stilbestrol in barrows at 150 lb. had somewhat of a depressing effect on rate of gain, improved feed efficiency in the spring but not the fall trial and except for a trend toward greater loin eye area appeared to have little influence on carcass composition.

Free-Choice versus Complete Mixed Rations Fed Either in Meal or Pelleted Form in Growing-Finishing Swine: Pigs fed a complete ration, pelleted or as a meal, gained more rapidly than those fed shelled corn and supplement free-choice. However, feed cost per unit of gain was lower under the free-choice system.

Pelleting of the complete ration increased gains 0.1 lb. per day and resulted in a saving of 20 lb. of feed per 100 lb. of gain, the improvement in performance occurring largely after the pigs reached a weight of 120 lb.

Pelleting of the protein supplement resulted in only 0.05 lb. per day increase in daily gain and a saving of nearly 5 lb. of supplement and 2.5 lb. of total feed per 100 lb. of gain.

The greatest difference in growth rate occurred between the groups which required either the pelleted complete ration or the protein supplement in meal form fed free-choice with shelled corn, an increase of 12.2% being associated with the feeding of the pelleted complete ration.

The Effectiveness of Injectable Irons in the Prevention of Baby Pig Anemia: Neither the intramuscular injection of 10 ml. of iron dextran (Armidexan) in sows at 110 days of gestation and at farrowing nor the injection of 20 ml. at farrowing and again three days after farrowing appeared to influence hemoglobin level in the pigs nor the level of iron in the sow's milk when measured on the sixth day.

The percentage decrease in hemoglobin level from birth to the sixth day ranged from 15 to as much as 46%, emphasizing the need for early treatment with iron to prevent anemia.

In a study of different methods of using injectable irons and a comparison of different products, a single intramuscular injection of 2 ml. of iron dextran (containing 50 mg. iron/ml.) in pigs at either 2 or 7 days of age was effective in maintaining a satisfactory blood hemoglobin level as long as 21 days after birth. A second injection at 14 days increased hemoglobin level somewhat, with values averaging as high as 12.5 gm./100 ml. of blood.

A single injection of 2 ml. of iron dextran (containing 75 mg. iron/ml.) at 2 days maintained hemoglobin at a level similar to that resulting from two injections of iron dextran (50 mg. iron/ml.) given at either 2 and 14 or 7 and 14 days of age.

The subcutaneous injection of peptonized iron (44 mg. iron/ml.) at 7, or 7 and 14, days of age did not result in as high a hemoglobin level at 21 days as that measured in pigs injected with iron dextran.

Although 21 day hemoglobin levels were influenced by the various iron treatments, little difference was noted in the average 21 or 56 day pig weights.

In a trial conducted at Ohio State University, pigs farrowed on concrete and moved to pasture within one week were not heavier at 8 weeks after having received iron injections at 3 days of age.

The Feeding of Soybean Meal Free-Choice with Corn to Pigs on Pasture: In two trials conducted at Ohio State University, growing-finishing pigs fed on pasture had a tendency to eat more soybean oil meal than necessary to balance their ration when it was offered free-choice with either shelled or ground shelled corn plus a mineral mixture. Grinding of the corn appeared to increase its palatability, resulting in a greater proportion of corn to supplement consumed. In only one of four groups of pigs did the inclusion of 7% of a mineral mixture in the soybean meal reduce consumption.

AFMA

(Continued from page 7)

I feel, however, that in 1975 the Corn Belt will be producing about the same percentage of hogs as at the present time."

Poultry buyer for food chain: "Feed manufacturers have by-passed one of the basic concepts of business. They have not assisted in providing a profitable market for their product. The end product is not feed—it is frying chickens. They should provide a market for the increased production . . . An experiment by our company in eliminating dual prices on broilers was unsuccessful."

Feed executive: "The feed manufacturer must render a service if he is to survive . . . It comes down to a point of total economics . . . Production of end products will be where it is most efficient . . . The feed manufacturer should know the market for the end product before he starts to produce."

Ag economist: "I think the feed industry, like the steel and metal industry is going to sell feed manufactured to specifications. Like the steel and metal industry, many feed manufacturers will sell limited lines to a select group of customers . . . The ultimate outcome depends upon who can do the job at the least cost . . . Integration in Corn Belt hogs will proceed more slowly than it has in some other commodities. On the other hand, in the West, hog production will expand largely through an integrated program."

Feed executive: "Integration is not always more efficient than independent owners working together . . . The Corn Belt's advantage on feed is only one consideration in location of production . . . The feed manufacturer must gear himself to meet the demand wherever it may be located . . . As operations get larger, the feed manufacturer's margin to perform a specific job is going to be less."

St. Regis Offers to Buy Chemical Packaging

SAVANNAH, GA.—The St. Regis Paper Co. has filed with the Securities & Exchange Commission a registration statement relative to the issuance of shares of St. Regis common stock to be offered in exchange for the 110,000 outstanding shares of common stock of Chemical Packaging Corp., Savannah.

The proposed offer would provide that if the exchange offer is declared effective, a total of not exceeding 20,000 shares of St. Regis common stock would be issued on the basis of one share of St. Regis stock for 5½ shares of Chemical Packaging stock.

Acquisition of the shares of Chemical common stock by St. Regis will provide St. Regis with additional bag manufacturing facilities for serving customers in the southeastern area of the U.S. and extend the multi-wall bag business of St. Regis into an area which includes manufacturers of chemical fertilizer not presently served by St. Regis.

Feeder Pig Sale

HARRISON, ARK. — The North Arkansas Meat-Type Feeder Pig Assn., organized here recently to promote the production of bacon-type hogs, has set Aug. 6 as the date of its first sale. An association spokesman said the group expects more than 1,000 pigs to be consigned to the sale, which will be held at the Northwest Arkansas District Fairgrounds here. Buyers from about a dozen midwestern states are expected to attend.

The pigs will be graded according to type, breeding, weight and health certification. The sale is open to any producer whose animals can meet entrance requirements.

P. H. Dix — James Balcam

Drew Sales Staff Changes Announced

LINDSAY, CAL. — E. F. Drew & Co., Inc., has announced the promotion of P. Harvey Dix from district sales supervisor of the Pennsylvania, Maryland, Delaware and Virginia territories to assistant sales manager of the company's agricultural division.

F. C. Swartz

Freeman C. Swartz will replace Mr. Dix as district sales supervisor of these territories. Mr. Swartz was previously associated with Bradley & Baker of New York and was attached to its Baltimore office.

James Balcam has been appointed sales representative for the company's agricultural division in the Pacific coast area of operations, with headquarters at Lindsay, Cal. Mr. Balcam was previously associated with Wirthmore Feeds, Inc., Waltham, Mass.

1960 Wheat Support Prices Announced

WASHINGTON—The U.S. Department of Agriculture has announced an "advance" minimum national average support price of $1.77 per bu. for 1960-crop wheat, if wheat marketing quotas are approved by producers in the July 23 referendum.

The advance support price reflects 75% of the estimated parity price for wheat as of the beginning of the 1960-61 marketing year, July 1, 1960, according to the USDA announcement.

Unless growers disapprove quotas, says USDA, the law provides for a variable support (75-90% of parity) based on the relationship between the estimated total supply of wheat available for the marketing year and a determined normal supply for the year.

If marketing quotas are disapproved, the support level in the commercial wheat producing area under legislative provisions will be 50% of parity, or a national average of about $1.18 per bu. on the basis of the estimated parity price for July 1, 1960. Compliance with allotments would continue to be a condition of eligibility for the lower support price. Under these circumstances, says USDA, noncommercial support rates would be 75% of parity.

Jobbing Manager Leaves Eshelman

LANCASTER, PA. — Richard A. Reed, manager of the jobbing division, John W. Eshelman & Sons, Lancaster, has resigned his position effective July 15.

At that time, Mr. Reed will join the Lancaster office of Reynolds & Co., stock and commodity brokers, to specialize in grains and commodities.

Prior to joining Eshelman in 1956, Mr. Reed owned and operated his own grain and cotton firms in Clay County, Arkansas, and Rio Hondo, Texas.

Named Merck Southern Sales Representative

RAHWAY, N.J.—Dale C. Dean, a native of Missouri, has been appointed agricultural sales representative in four southern states for Merck & Co., Inc., chemical division. Mr. Dean will reside in Birmingham, Ala., to serve Alabama, Mississippi, Louisiana and northwestern Florida customers.

D. C. Dean

Mr. Dean joined Merck last year as a sales representative for animal health products in Arkansas and southern Missouri. He has moved to Birmingham from Springfield, Missouri, and will report to Fred O. Church, region agricultural sales manager for Merck at Atlanta.

He was born in Fordland, Mo., and graduated from the University of Missouri with a bachelor of science degree in agricultural economics.

Prior to joining Merck, Mr. Dean was with a Kansas City meat packing firm as supplement and ingredient feed salesman, and served in Missouri as a feed sales representative for the same company later.

PENB Committees To Convene July 22

CHICAGO—The first meeting this year of the allied and three commodity committees of the Poultry & Egg National Board will be held at the Statler-Hilton Hotel in St. Louis, Mo., Wednesday, July 22, starting at 2 p.m., it was announced this week by Lloyd H. Geil, PENB general manager. These meetings have been scheduled in cooperation with the American Poultry & Hatchery Federation to avoid conflicts in programming. The PENB executive committee will hold its meeting at 6:30 p.m. in the same hotel.

Members of the four committees will first meet jointly to hear progress reports on PENB's financing and promotion for the first half of 1959. Immediately following, they will meet as committees to consider ways to strengthen promotional activities for the next five months.

Another major phase of their deliberations will be to take appropriate action on the promotional needs of the industry in 1960. This will enable PENB to draft next year's programs for each commodity for the committees' final consideration at their second meeting in Chicago Nov. 9. The programs in their final drafts will later be presented to the board of directors with a budget for approval.

New Texas Feed Firm

ALPINE, TEXAS — Charles B. Boreing, long time leader in the New Mexico feed industry, has leased a location here to establish a Morea liquid feed business.

He resigned his position as manager of J. P. White Industries, Roswell, earlier this year. Mr. Boreing is immediate past president of the New Mexico Grain & Feed Dealers Assn. and was vice president, a position that he resigned when he moved to Texas.

Builds Pellet Plant

REMSEN, IOWA — The Farmers Cooperative Co. here is now building a livestock feed pelleting plant which is expected to go into operation Dec. 1. Officials said it will be the first pelleting unit in this area. Preliminary construction is under way by the Mill & Elevator Co., Des Moines, on a 24 by 34 ft. concrete building, 75 ft. high. It will have pelleting equipment capable of a maximum output of 10 tons per hour. Total cost is estimated at $180,000.

INDEX OF ADVERTISERS

The index of advertisers is provided as a service to readers and advertisers. The publisher does not assume any liability for errors or omissions.

Abbott Laboratories, 48, 49, 60, 61
Agricon, Inc.
Agri-Tech, Inc.
Albumina Supply Co. 47
Allied Chemical Corporation, Nitrogen Division
Amburgo Co., Inc. 60, 62
American Cyanamid Co. 30, 31
American Dehydrators Assn.
American Elev. & Grain Div. 41
American Iron Works
American Mill Serv. Co.
American Poultry & Hatchery Fed.
American Scientific Lab.
Anderson, V. D., Co. 56
Andrews Machine
Arbor Acres Farm 29
Armour & Co. 99
Armstrong, O. B., & Son
Associated Feed Products 53
Aubrey Feed Mills

Baker, H. J., & Bro.
Baker, J. T., Chem. Co.
Barnard & Leas Mfg. Co., Inc. 102
Baroid Chemicals, Inc., Subsidiary of National Lead Co.
Bartlett, C. O., & Snow Co.
Bates Grain Co.
Bauer Bros. Co.
Baughman Mfg. Co., Inc. 78
Baxter, A. E., Engineering Co. 83
Beardstown Mills Co.
Bemis Bro. Bag Co. 65
Berg, Paul 108
Berkshire Chem. 33
Bigelow Sales Co. 111
Bingman Lab., Inc. 83
Black, Sivalls & Bryson, Inc.
Blatchford Calf Meal Co. 67
Blomfield-Swanson
Borden Company 16, 71
Bowman Feed Prod., Inc. 20
Bremco Alfalfa
Brewers Yeast Council, Inc.
Brower Manufacturing Co. 14
Burlap Council
Burrell, James H., & Co., Inc.
Burrows Equipment Co. 107
Butler Chemical Co. 51
Butler Mfg. Co. 62

Calcium Carbonate Co.
Calhoun Beach Hotel
California Pellet Mill Co. 34
Caple, A. B., Co. 84
Cardinal Scale Co.
Cargill, Inc. 16
Champion Portable Mill Co. 108
Chantland Mfg. Co. 36
Chase Bag Co. 50
Checkerboard Grain Co. 107
Chippewa Plastics, Inc. 40
Citrus Processors Assn.
Clinton Corn Processing Co.
Clofine, Herbert K. 23
Colby Milling, Inc. 98
Collier Livestock-Feeder Co.
Columbia Phosphate Co. 99
Columbia Quarry Co. 40
Columbian Steel Tank Co.
Commercial Solvents Corp. 12, 13
Consolidated Blenders, Inc. 111
Continental Grain Co. 111
Corn Products Sales Co. 100
Coronet Phosphate Co. 77
Czarnikow Rionda

D. C. A. & Co. 95
Dabney-Hoover Supply Co., Inc.
Daffin Mfg. Co. 96
Dannen Mills, Inc. 10
Darling & Co. 88
Davies, William E., Co. 43
Davis, H. C., Sons' Mfg. Co. 10
Dawe's Laboratories, Inc. 101
Day Company, The
Daycom, Inc. 94
Delaware Poultry Laboratories 94
Devold, Peder, Oil Co. 87
Diamond Alkali Co. 56
Diamond V Mills, Inc.
Distillation Products Industries 63
Distillers Feed Research Council 66
Doane Agricultural Service
Doane Feed Products Co.
Dorn & Mitchell Laboratories
Dorsey Trailers
Doty Laboratories
Douglas Chemical
Dow Chemical 82
Duplex Mill & Mfg. Co. 41
Du Pont de Nemours & Co., Inc., E. I.

Early & Daniel Co.
Eastman Chemical Prod. Inc.
Ehrsam, J. B., & Sons Mfg. Co., The
Elba Corp. of America
Erlez Mfg. Co.
Eschenheimer, Rudy, Co.
Ewing, Ray, Co. 52

Farmers Friend Mineral Co. 36
Ferguson Fumigants
Ferrell, A. T., & Co.
Fischbein, Dave
Flavor Corp. of America 108
Food Mach. & Chem. Corp.
Forster Mfg. Co. 87
Fox Co. 88
Fruen Milling Co. 27
Fuller Co. 98

Gerber Sheet Metal
Gooch Feed Mills 68
Gorton-Pew Fisheries 68
Grace Chemical Co.
Grain Processing Corp. 25
Gruendler Crusher & Pulverizer Co.
Gump, B. F., Co.

Hand, Peter, Foundation 3
Harris-Crane, Inc.
Harshaw Chemical Co. 107
Hayes and Stolz
Heil Co., The
Helm Mfg. Co.
Henke Mfg. Co.
Hess & Clark, Inc. 57, 103
Heterochemical Corp. 92
Highway Equipment Co. 33
Hilltop Laboratories
Hoffman-Taff, Inc. 84
Hogenson Const. Co.
Hogg, N. D., Ltd.
Holt Products Co.
Honeggers' & Co. 54, 55, 116
Honeymead Products Co.
Hot Spot Detector, Inc.
Howe Scale Co.
Howes, S., Co., Inc.
Hubbard Milling Co.
Hubbell, Charles H. 20
Hudson Pulp & Paper Corp.

Ibberson, T. E., Co. 95
Illinois Soy Products Co.
International Minerals & Chemical Corp. 59
International Paper Co. 11
International Salt Co., Inc. 69
Iowa Limestone Co.

Jackson, Gilbert, Co., Inc.
Jacobson Machine Works 71
Jersee Co.

Kansas Soya Prod. Co., Inc.
Kees & Company 95
Kellogg, Spencer, & Sons, Inc
Kem Mfg. Co.
Kent Feeds
Kent, Percy, Bag Co., Inc. 107
Key Alfalfa Dehydrators
Kimber Farms 90
Kindstrom-Schmoll Co.
Koelsch, Charles J., Grain Co.
Koppers Co., Inc.
Kraft Bag Corp. 58
Kraft Foods Co. 46, 47

LaBudde Feed & Grain Co. 108
Lakeland Engineering
Land O'Lakes Creameries, Inc.
Landers Mill Mfg. Co. 93
Lauhoff Grain Co. 84
Leach Mfg. Co. 72
LeGear, Dr., Inc.
Lennox Industries 100
Lavens Mfg. Co.
Lilly, Eli, & Co. 73
Limestone Products Corp. of America 75
Loncala Phosphate Co.
Longhorn Eng. Co.

McCabe Grain Co., Ltd.
Maney Bros. Mill & Elev. Co. 112
Mann, W. P., Sales Co.
Marine & Animal By-Products
Martin, Theo. W., & Son
Master-Bilt Refrigeration Mfg. Co.
Mathews Co.
Mayo Shell Corp. 80
Merck & Co. 5, 81
Mid-Continent Grain Co. 94
Mid-States Construction Co.
Midwest Alfalfa 48
Midwest Dried Milk Co.
Milbrew Co. 42
Miller, Mel, & Co., Inc.
Miller Publishing Co., The
Minneapolis Sewing Mach. Co.
Minnesota Linseed Oil Co. 74
Minnesota Specialty Co., Inc.
Monsanto Chemical Co.
Mooers Mfg. Co.
Moore Dry Dock Co. 27
Morton Salt Co. 45
Murphy Products Co.
Myers-Sherman Co.

Nagel, Herman, Co. 90
Natl. Alfalfa Dehydrating & Mfg. Co.
National Distillers Prod. Co. 33
National Molasses Co. 34
National Renderers Assn. 52
Nellis Feed Co. 105
New Century Co., The
New England By-Prod. Corp. 68
Nichols, Incorporated 89
Nootbaar, H. V., & Co.
Nopco Chemical Co. 28, 29
North American Trading & Import Co.
North Carolina Granite Corp.
Nor-Vell, Inc.
Nutrena Mills, Inc. 16

Oakes Mfg. Co.
Olavarria & Co. 41
Olin Mathieson 53
Oyster Shell Corp. 76
Oyster Shell Prod. Co. 42

Panogen Co.
Paper-Calmenson & Co.
Park, Philip R., Inc.
Parkersburg Rig & Reel Co.
Parks, J. P., Co. 112
Parrish & Heimbecker
Parrish, N. K.
Paxton Processing Co. 107
Pay Way Feeds
Peavey, F. H., & Co. 108
Pearless Equip. Co., Inc.
Penick, S. B., & Co.
Pfizer, Chas., & Co. 17-19
Phelps Dodge Refining Corp.
Pilch's Poultry Breeding Farms 58
Pittsburgh Plate Glass Co.
Pless, Joe N., Co.
Prater Pulverizer Co. 44
Pratt Labs., Inc.
Productive Acres Mfg. Co.
Publicker Industries, Inc. 70

Quaker Oats Co.

Ralston Purina Co. 37
Rapids Machinery Co. 67
Raymond Bag Corp. 84
Red River Alfalfa Co.
Reliance Feed Co.
Richardson Scale Co.
Richardson, James, & Sons
Riley Feed Co.
Rion Crush Stone Corp.
River Rest Turkey Sales, Inc.
Roskamp Hutler Co.
Rosner-Hixson Laboratories
Ross Machine & Mill Supply
Ross Mfg. Co.
Ryde & Co. 99

S. & H. Lab. 83
St. Regis Paper Co.
Salsbury's, Dr., Labs. 38, 39
Scanlan, Ivan, & Co.
Schanley Distillers, Inc. 92
Schutte Pulverizer Co., Inc.
Screw Conveyor Corp. 23
Seagram, Joseph E., & Sons, Inc. 35
Seco, Inc. 76
Sedberry, J. B. 105
Seedburo Equipment Co. 21
Shanzer Mfg. 104
Shelby Mfg.
Shellbuilder Co. 24
Sievert, C. W.
Simonsen Mfg. Co. 75
Small, The W. J., Co. 112
Smith, A. O.
Smith, Edward E., & Co.
Sohio Chemical Co.
Soluble Nutrients, Inc.
Southwest Mill Supply Co.
Specifide, Inc.
Spencer Kellogg & Sons, Inc.
Sprout, Waldron & Co., Inc. 97
Squibb, E. R.
Staley, A. E., Mfg. Co. 44, 72, 107
Standard Brands, Inc.
Stearns Magnetic Products
Sterwin Chemicals, Inc. 15
Stone Mountain Grit Co.
Strong-Scott Mfg. Co.
Sudenga Industries
Sunset Feed & Grain Co. 40
Superior Feed Co.
Sutorbilt Corp. 49
Swanson, Carroll, Sales Co.
Sweet Mfg.
Syntha Lab.

T. D. F. Company
Takamine Laboratory
Taste Engineering 7
Texas Mill Equipment Co.
Thayer Scale Corp.
Thoro-Speed Corp. 28
Ti-Co Industries 112
Tobias Enterprises 32
Toledo Scale
Toxite Laboratories
Trantatogen-Werk 104
Twin Supply Service, The 10

Ultra-Life Laboratories, Inc. 32
Union Bag-Camp Paper Corp. 91
Union Special Machine Co. 26
U. S. Industrial Chem. Co. 34
Universal Hoist Co.
Upjohn Company, The

Van Dusen Harrington Co. 108
Vantress, Chas., Farms, Inc. 9
Vineland Poultry Lab. 64
Vitamins, Inc. 64
Vit-A-Way, Inc.
Vitren Corp. 58
Vy Lactos Laboratories, Inc.

W-W Grinder Corporation 82
Wallace & Tiernan Inc. 80
Warren-Douglas Chem. Co.
Weighing & Control Components, Inc. 102
Wells, Ralph, & Co.
Wenger Mixer Mfg. Co. 42
Wertz Feed Co.
Western Condensing Co. 79
Western Yeast Co. 96
West Virginia Pulp & Paper Co.
White Laboratories, Inc.
White Shell Corp. 102
Whitmoyer Laboratories, Inc. 36
Wilhoit Laboratory
Wilson & Co.
Wilson, R. S., Co.
Winona Attrition Mill Co.
Wirthmore Feeds 85
Wisconsin Alumni Research Foundation 95
Woodward & Dickerson, Inc.
Wyatt Mfg.
Wyeth Lab. 50

Young, John F., Co.

Central Soya Buys Land for Terminal

MOUNT VERNON, IND.—Central Soya Co. of Fort Wayne, Ind., has purchased 26.37 acres of land here for the erection of a river-rail terminal. The Chicago & Eastern Illinois Railroad will serve the Mount Vernon installation.

The terminal's transportation operations will include barge, truck and rail shipping, company officials indicated.

Central Soya has not yet made public its specific plans for the terminal or when it will be constructed.

MARKETS

(Continued from page 1)

weather of late June was followed by cooler weather this week, along with scattered showers. But a steady rain for a day or more will be very welcome to provide needed replenishment of farm ponds and wells.

Farm prices for most grades of eggs continued to advance steadily this week, reaching a new high of 41@43¢ doz. for white jumbos, compared with quotations of 30@31¢ a month earlier. Other grades have advanced proportionately, and it is generally believed that eggs will not soon again be available at the very low prices quoted earlier this year.

With the July 4th holiday rush for poultry now over, supplies in this area again were ample this week to meet consumer requirements, with prices mostly holding steady to up 1¢ lb.

Area feed manufacturers generally believe that prices for both eggs and poultry will hold steady or even advance to higher levels during the weeks ahead, because of the widespread hatchery production decline.

Pacific Northwest

Steady to lower listings ruled this week's Pacific Northwest feed ingredient market trading.

Trade sources indicated at Seattle and Portland that formula feed movement continued on a volume basis with poultry feeds setting the pace.

The lower price trend was marked by weakness in wheat millfeeds and most whole grains. Wheat millfeed values declined $1 ton to levels that are $5 ton lower than on Jan. 1 and $8 ton lower than those of March 1.

Barley quotes were off $1-2 ton, while corn averaged 75¢ ton lower and milo listings were unchanged to $1.50 lower than the previous trading period.

Dairy feed movement continued to be limited by an abundance of green feed from pastures and ranges. Weather conditions remained favorable for grass production, but unfavorable for the region's grain and hay harvest.

Pacific Northwest alfalfa hay trading held prices steady. Second crop cutting got underway this week in Washington's Yakima Valley and Columbia Basin districts.

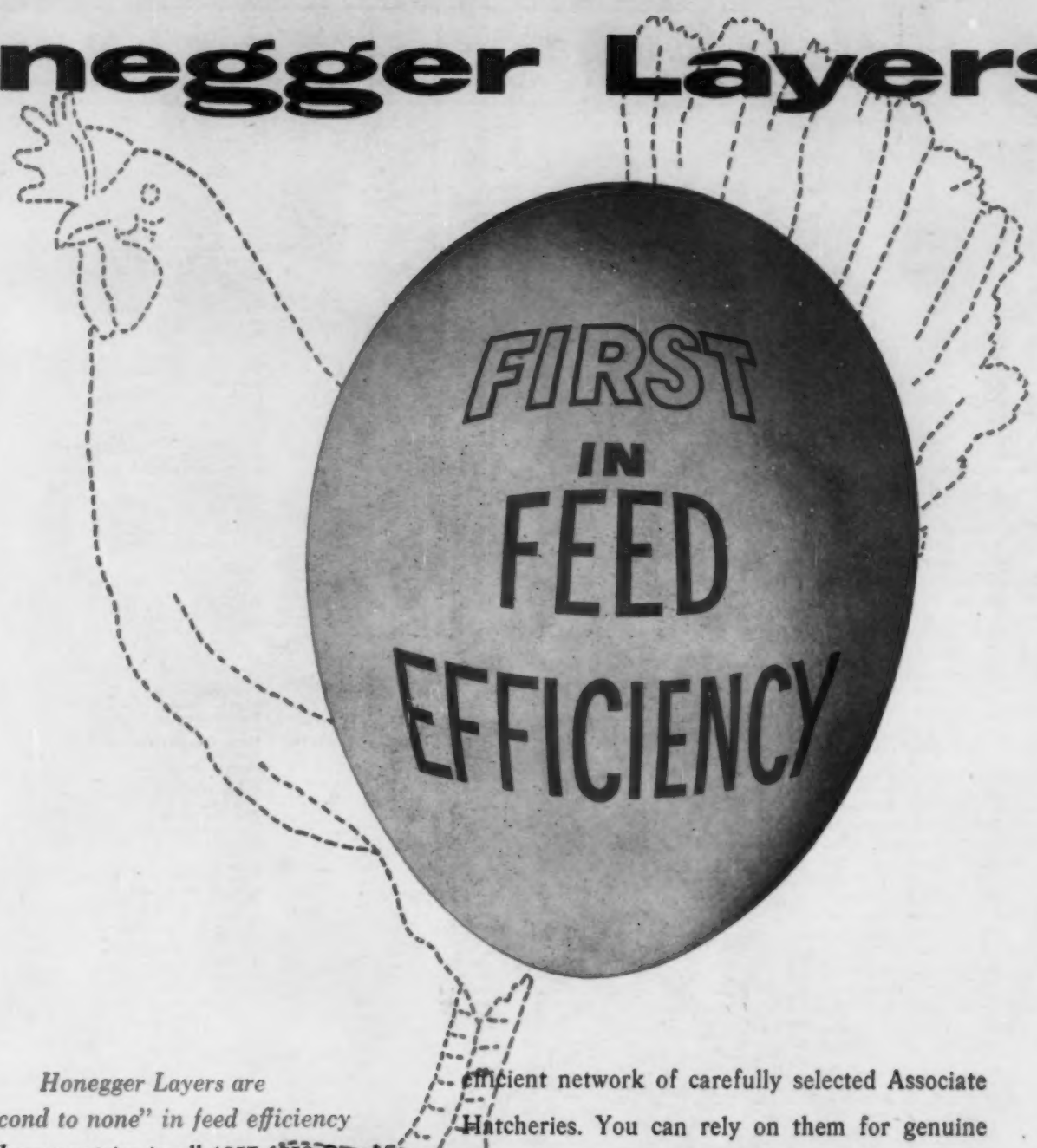
Oregon and Washington feeding ratios leveled off with some showing improvement over one month ago, but most were generally well below those of a year ago.

Mountain States

Formula feed dealers contacted this week all agree that sales volume has remained steady compared to the previous week. However, business has been up somewhat from a year ago at this time.

Cattle feeds are off a little from last week, but turkey feed has become very strong as turkey production is in its peak of the season.

Honegger Layers



Honegger Layers are
"second to none" in feed efficiency

Honegger Layer entries in all 1957-1958 Random Sample Tests, led the average of ALL other nationally distributed Strain Crosses, Hybrids and Breed Crosses with an average of 3.18 lbs. of feed per lb. of eggs. The average of ALL other breeds—3.54 lbs. of feed per lb. of eggs.

FIRST IN FEED EFFICIENCY . . . means more profit per bird housed . . . more income per dollar invested for your customer . . . better chance for profits in times when cost-price squeeze is on.

Build your feed tonnage with the
internationally famous Honegger Layer

Honegger Layers are produced and distributed coast to coast and in many foreign countries by an efficient network of carefully selected Associate Hatcheries. You can rely on them for genuine Honegger Layer Chicks and for poultry service and advice.

Do as hundreds of other good dealers have done . . . line up with one of the nation's outstanding egg laying strains . . . the Honegger Layer. And remember, 600 chicks will eat more than a carload of complete feed during their growing and laying period. Someone will profit by the increased feed tonnage . . . it might as well be you.

Write for complete details . . . Do it today!

HONEGGER Layers

HONEGGERS'

BREEDER HATCHERY

FORREST · ILLINOIS